

Desert

JULY, 1955 35 Cents





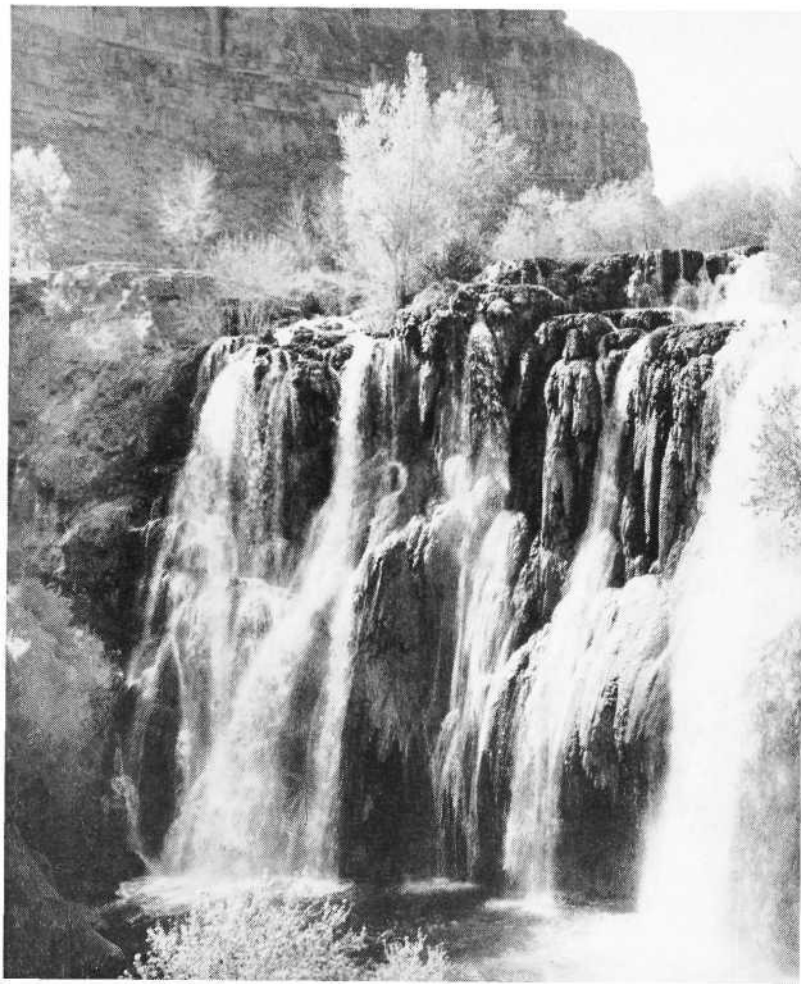
Great Horned Owl

Dick Randall of Wyoming won first prize in the May Picture-of-the-Month contest with his picture of a Great Horned Owl. Taken with a 4x5 speed graphic, Royal Pan film, f/11, strobe light, illumination at 1/5000 second.

PICTURES OF THE MONTH

Lacy Navajo Falls

The beauty of the 50-foot drop of the Navajo Falls in Havasu Canyon is caught in this picture, which won second prize in the contest for Weldon Heald of Tucson, Arizona.



DESERT CALENDAR

- July 2-4—Southwest All-Indian Pow-Wow, Flagstaff, Arizona.
 July 2-4—Reno Rodeo, Reno, Nev.
 July 2-4 — Frontier Days, Prescott, Arizona.
 July 2-4—Mescalero Apache Reservation, Fiesta and Devil Dance, Mescalero Agency, Highway 70, New Mexico.
 July 2-4—La Mesilla Fiesta (Gadsden Purchase), Mesilla, N. M.
 July 2-4—Old Town Spanish Fiesta, Las Vegas, New Mexico.
 July 2-4—Sierra Club Hike, Desert Peaks, Mt. Charleston, Nevada.
 July 2-4—Sierra Club Natural Science 3-Days at Mt. Jacinto, California, Hike or Back-Pack.
 July 2-5 — 22nd Annual Exhibit of Hopi Indian Arts and Crafts, Museum of Northern Arizona, Flagstaff, Arizona.
 July 3-4—Grants' 28th Annual Rodeo, Grants, New Mexico.
 July 4 — Celebration and Fireworks Display, White Sands National Monument, New Mexico.
 July 4—Rodeo, Taos, New Mexico.
 July 4—Cimarron Rodeo, N. M.
 July 4—Red River Rodeo, N. M.
 July 4 — Children's Picnic, Junior Chamber of Commerce, Yuma, Arizona.
 July 4—Annual Show and Fireworks, Lion's Club, Mesa, Arizona.
 July 4 — Annual Jaycee Fireworks Show, Phoenix, Arizona.
 July 7-9—Ute Stampede, Nephi, Utah.
 July 8-9—Melon Festival, Glendale, Arizona.
 July 14—Annual Fiesta, Corn Dance, Cochiti Pueblo, New Mexico.
 July 14-17 — Rodeo de Santa Fe, Santa Fe, New Mexico.
 July 15-17—Western Pageant, Ogden, Utah.
 July 20-25—Utah Days of '47, Salt Lake City, Utah.
 July 20-25 — Pioneer Days, Ogden, Utah.
 July 23-25 — Spanish Fork Rodeo, Spanish Fork, Utah.
 July 23-31—Annual Exhibit of Navajo Indian Arts and Crafts, Museum of Northern Arizona, Flagstaff, Arizona.
 July 24—Coconino County Sheriff's Posse Rodeo, Flagstaff, Arizona.
 July 24—Pioneer Days: Parade, Barbecue, Mesa, Arizona.
 July 25-26—Spanish Colonial Fiesta, Corn Dance, Taos Pueblo, Taos, New Mexico.
 July 26—Indian Fiesta and Dances, Santa Ana Pueblo, New Mexico.
 July 26 — Annual Fiesta, Laguna Reservation, New Mexico.
 Month of July—Exhibit of Georgia Ott Averett's paintings of southwestern Indians, Southwest Museum, Los Angeles, California.



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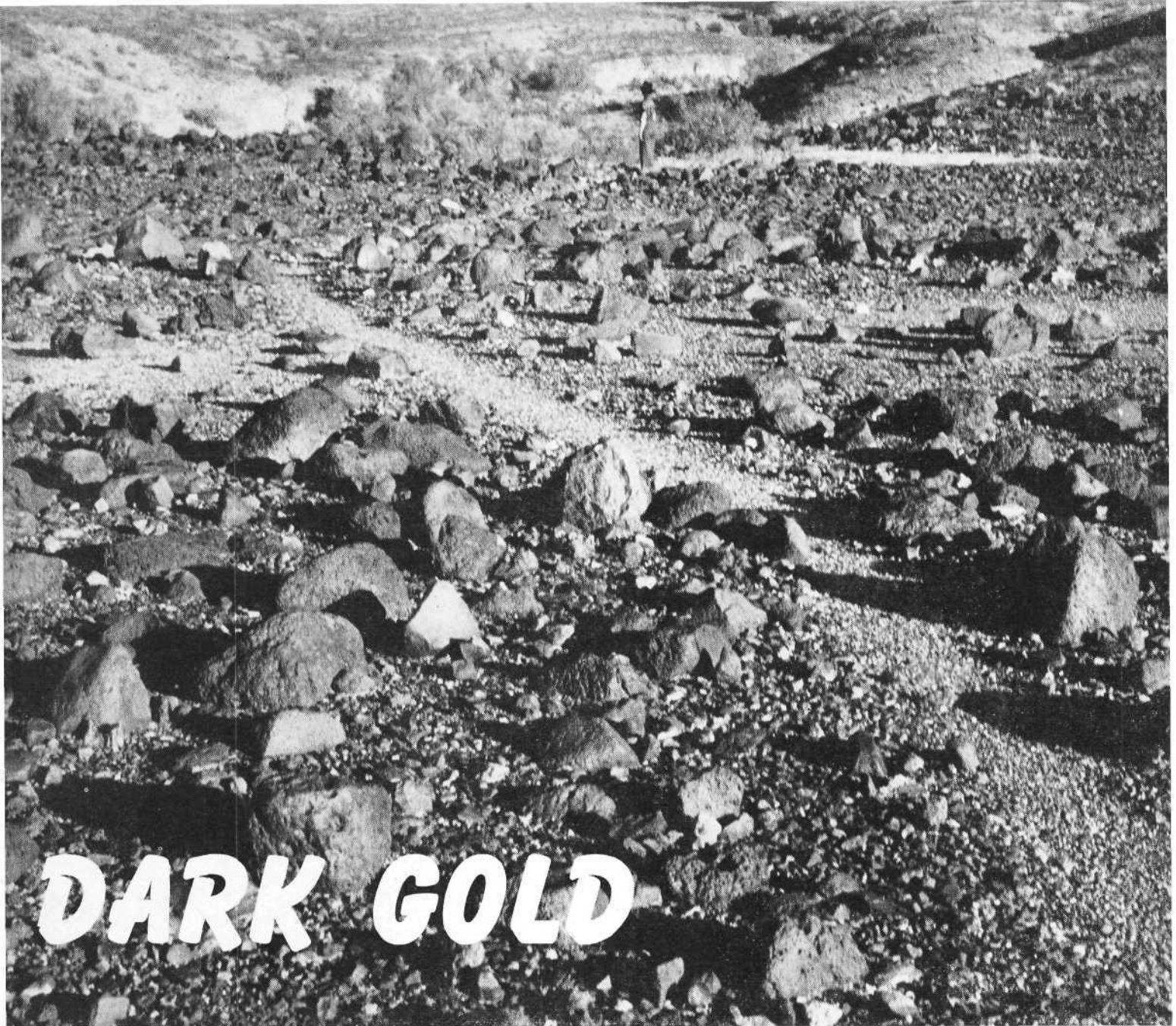
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DARK GOLD

Indian trail across a mesa at the base of the Chocolate Mountains. "Slim" followed such a trail when he found his gold. These trails lead to all the important natural watering places and some branches reach tinajas known to few whites.

... on the Tabaseca Trail

By HAROLD O. WEIGHT
Photographs by the author
Map by Norton Allen

TOM CLARK was one of the pioneer burro prospectors of the Colorado Desert. He was among the earliest homesteaders in the Palo Verde Valley, and helped dig the first irrigation canal there.

Old Tom has been gone more than 13 years now. He was 84 when he disappeared.

One warm summer day he left his home at Quien Sabe Point on the Colorado River, went to Blythe and took

An ailing prospector panned \$120 in gold from a sack of red earth—and then drew a map showing the location of his strike. Tom Clark disappeared many years ago—and with him the map—but friends of the old man believe he was telling the truth—that somewhere between Tabaseca Tank and Dos Palmas Oasis on the Southern California desert is a rich placer field yet to be re-discovered.

the bus to visit relatives and friends in the Los Angeles area. Somewhere on that trip Tom vanished utterly and finally.

With him disappeared a crude map, the only physical clue to a rich gold deposit which must lie somewhere near the old Bradshaw Trail across far-southeastern California. With him also vanished hope for any amplifica-

tion of the existing waybill to that lost gold.

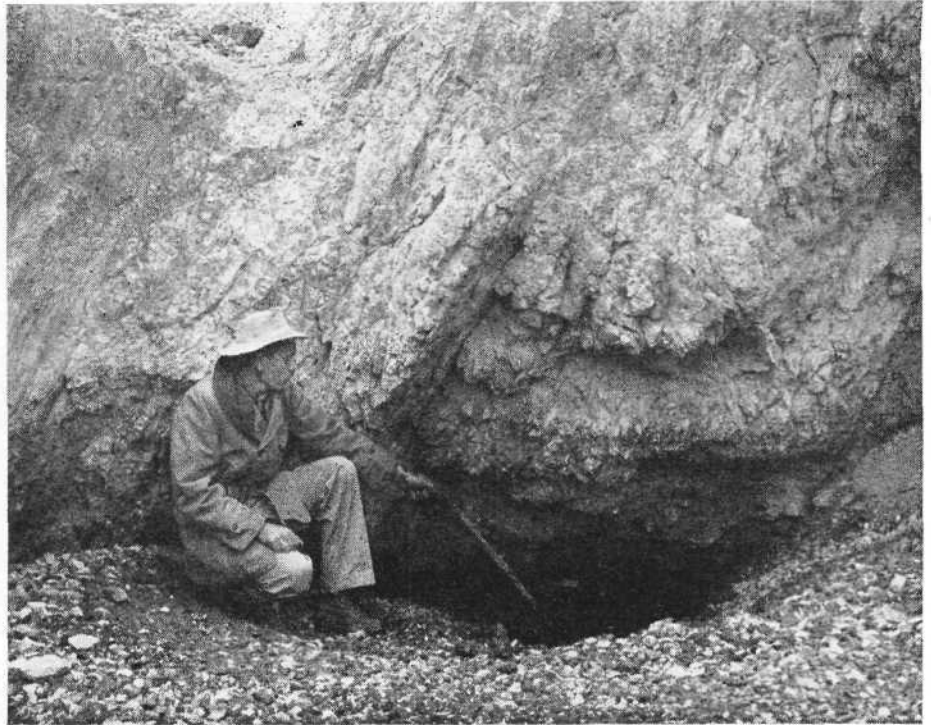
Probably, though, Tom could not have given more details. His knowledge came only from the words scribbled and the map hastily drawn by a man who lay dying at Dos Palmas Oasis more than half a century ago. His warranty for the story was the \$40 in rough desert-burned placer gold

which came with the map, repayment for a grubstake Tom never intended should be repaid.

While he was young enough to search for the gold himself, Tom never even mentioned its existence. But while visiting at the old camp of Picacho in the winter of 1938, three years before his disappearance, he told the story to Ed Rochester and the late Earl Kerr. He said that it was the first time he had talked about it, and whenever any other person appeared he would cease talking. Nor would he resume until he, Ed and Earl were alone again. Since Picacho is popular in the winter, there were nearly two weeks of interrupted sessions before the complete story, brief though it was, was told.

Old Tom Clark was young Tom Clark when he came to Mesquite Diggings, the last really big gold placer found on the Colorado Desert. The Diggings lie at the southern edge of the Chocolate Mountains a few miles northeast of the Southern Pacific Railroad station of Glamis. Felisario Parra is said to have discovered them about 1876. At the beginning, Mesquite Diggings gave fabulous returns for a dry placer, and Tom Clark arrived during that period.

Prior to World War II these placers have known revivals and abandonments, payoffs and failures. Ed, there as a youngster, estimates a production

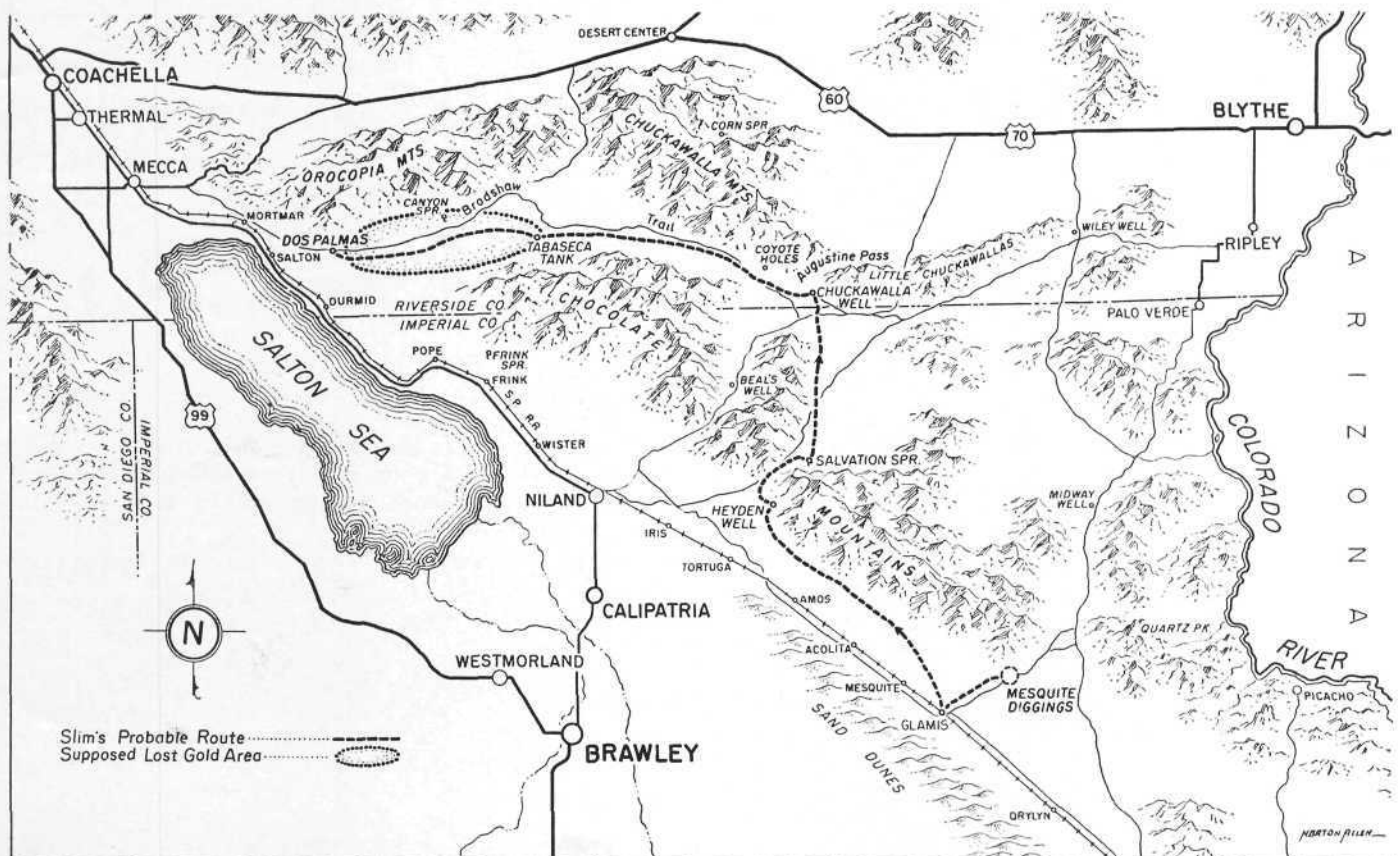


Tabaseca Tank, from which Slim is believed to have started when he found his gold. There were 15 to 20 gallons of water in the tank in January, 1955. Even when no water is visible it usually can be obtained by digging into the big gravelly bowl of the tank.

of more than \$100,000 when they were first worked. My father, Orlando Weight, visiting the Diggings between 1910-12 when he was telegrapher and postmaster at the nearby railroad-mining settlement of Ogilby, found about 60 claims taken up and the miners, chiefly Mexican, making good returns with their drywashers. He found the other principal product of the area seemed to be six-foot rattle-

snakes. Every prospector carried his little tin box of potassium permanganate, still trusted by oldtimers and then considered a sure cure for rattler venom.

It was during the first rich boom—when Tom Clark was recovering as much as \$80 and \$90 gold a day—that a nameless “lunger,” whom we will call Slim, turned up at Mesquite Diggings. Slim left the train at Glamis





Here at Dos Palmas Oasis, "Slim" learned the richness of the placer he had found on the Indian trail and sent gold and a map to his grubstaker, but died before Tom Clark could reach him.

without funds or friends, expecting to die but with a forlorn hope that heat, sunshine and dry air might save his life. Many such unfortunates, suffering from tuberculosis, were sent to the arid southwestern deserts to survive or perish in those days. A surprising number of them were cured. Or at least they were enabled to live out normal lives if they remained on the desert.

More for diversion than any other reason, Slim wandered up from Glamis to the Diggings. There he caught the gold fever. But all the promising claims were taken up.

Slim met Tom Clark at the Diggings. Clark was flush then. He was big-hearted and open-handed all his life. He fished out two \$20 gold pieces.

"These," Tom said, "will buy you a prospecting outfit and grub to last you quite a while." (In those days \$40 was money.) "There are sure to be undiscovered placers left in this big desert. Maybe farther up along the Chocolates. Sunshine and air and the right amount of work will help you. Go out and see what you can find."

Slim went gladly.

From Glamis, with a burro pack outfit, he trailed northwest along the harsh, vivid, magnificent Chocolate Mountains. He halted for a while at Heyden — or Heyburn — Well. He rounded the point and entered what is now known as Salvation Pass, camping again at Salvation Spring. His route here cannot be traced today, of course, because all this beautiful desert is in the Chocolate Mountain Aerial Gunnery Range, one of the many reserves expropriated from the public and private domain by the U. S. Navy.

From Salvation Spring he trekked northeastward, passing entirely through the Chocolates. Sometime thereafter he reached and camped at Chuckawalla Well, at the base of the Little Chuckawallas. His burros particularly enjoyed this watering place and were reluctant to leave. But Slim rooted them out and, following either the old Indian trail or the almost abandoned

Bradshaw stage and freight route, traveled westerly to Tabaseca Tank, near the western tip of the Chocolates.

Slim's health was improving. But at or near Tabaseca, his inexperience betrayed him. His burros got away. He followed and caught them again at Chuckawalla Well, where they had returned to resume the easy life.

Again Slim set out for Tabaseca Tank. But the strenuous exertion of running down his burros proved to have been beyond his capacity to endure. Realizing that he was very ill, he set out from Tabaseca Tank for the oasis of Dos Palmas, less than 20 miles away and near the railroad. He took an Indian trail which he hoped would be the most direct route.

Somewhere along that trail, where it crossed an elevation, he sat down

to rest. He noticed that the earth around him was very red. Remembering that prospectors at Mesquite Diggings had told him gold sometimes occurred in such earth, Slim filled a sack with it, loaded the sack on a burro, and continued along the trail.

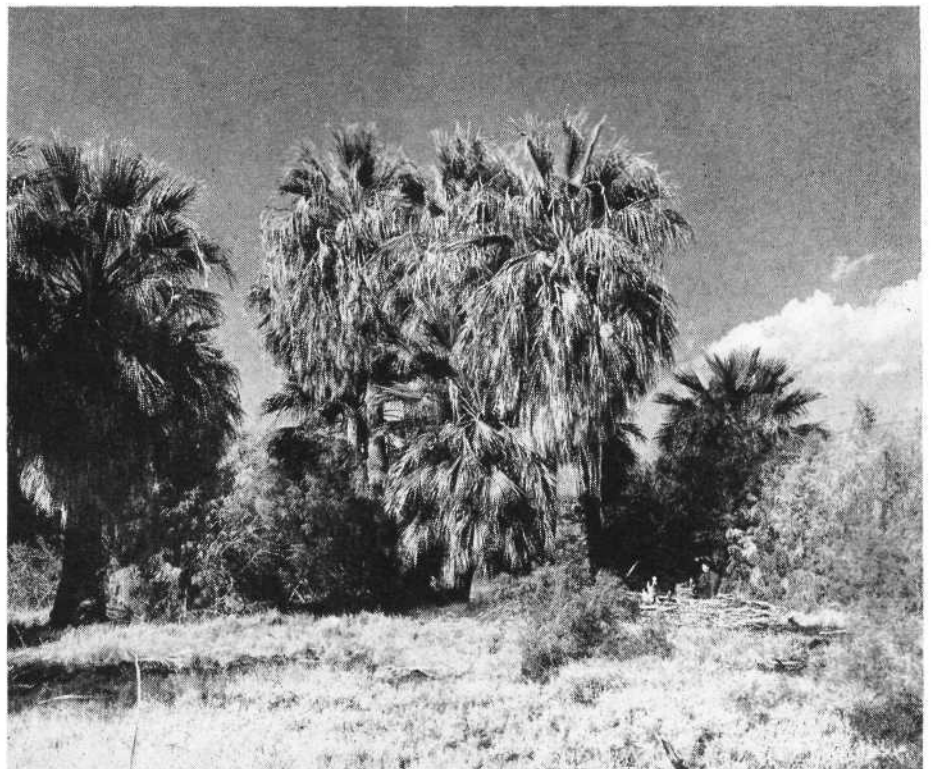
When he reached Dos Palmas, he found several other prospectors camped there. Either with their help or by himself Slim panned out the red dirt he had sacked. It was rich in gold. Resting there at the oasis Slim may have dreamed of what he would do if he regained his strength. But he knew his condition was serious, and he felt that he had a debt to repay. So he wrote of his find and made a crude map. He enclosed with the map \$40 worth of the gold he had found, and sent it to Tom Clark at Mesquite Diggings.

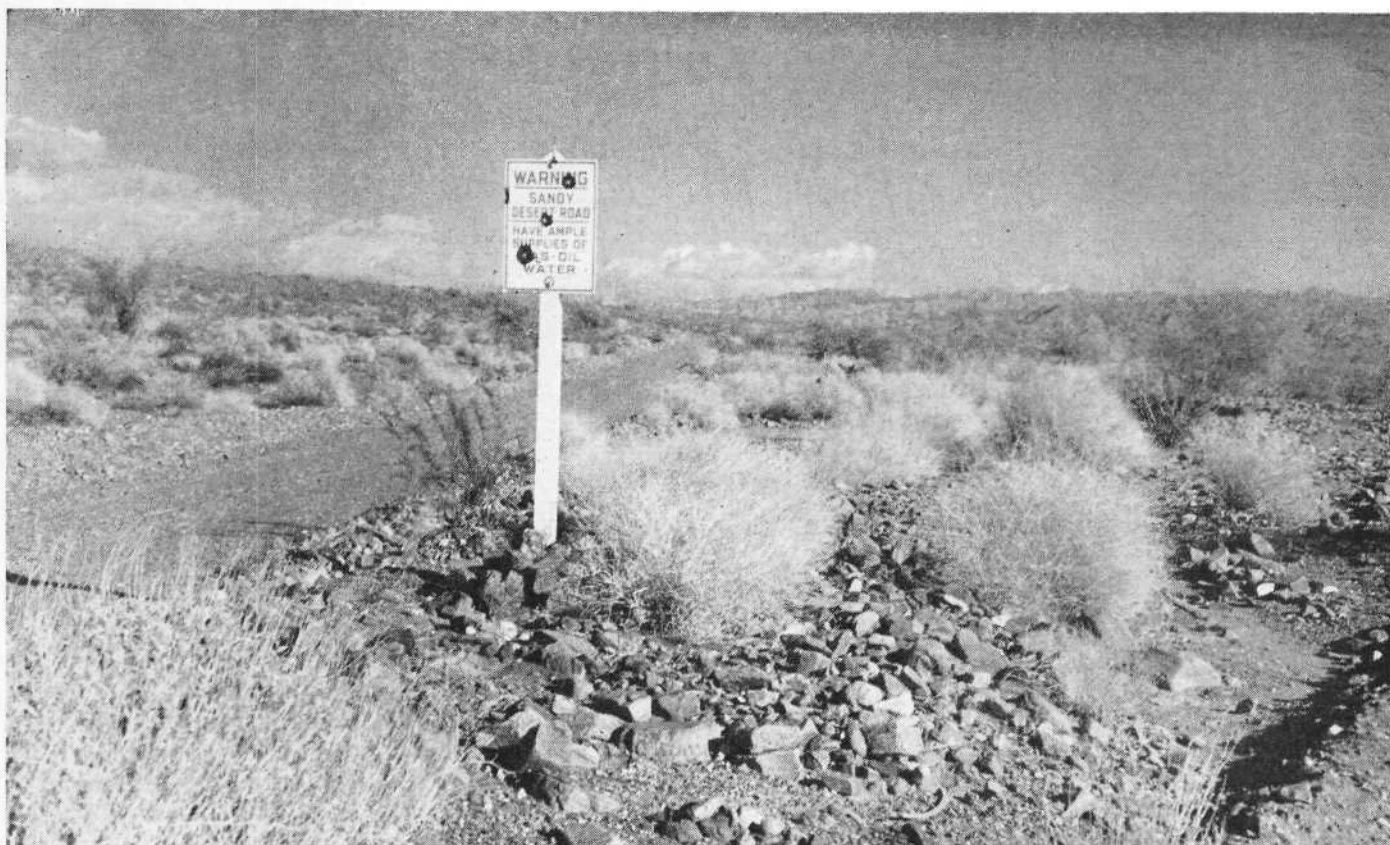
When Tom learned Slim was so ill, he immediately set out for Dos Palmas. He went more to help the lonely man than through any interest in his gold strike, for Tom was still doing well at the Diggings.

He arrived too late. Slim had died and had been buried. Among his possessions, was another \$80 worth of the same desert-burned gold he had sent to Tom Clark. That meant that the small sack of red dirt Slim had picked up in his brief stop had carried \$120 in gold.

Tom returned to Mesquite Diggings. He made no effort to find the source

Two rock arrow-markers on the west bank of the little arroyo holding Tabaseca Tank point directly toward the water hole which otherwise might easily be overlooked. Tank lies just out of the picture, left and down.





Backtracking "Slim" from Dos Palmas, present day travelers still find the old road lonely and dangerous. Here the trail, close on the track of the old Bradshaw road, approaches sandy Salt Creek Wash as the orange-and-gray splotched Chocolates loom closer on the right.

of Slim's gold at that time. But he kept the map in a safe place. For a long time he also kept the rough, blackened gold with which the dying man had paid back his grubstake.

Years later, after Tom had homesteaded in the Palo Verde Valley, his home was robbed and searched three successive times. Tom believed the marauders were hunting for the map to Slim's lost gold. Since he had mentioned the story to no one, he concluded that Slim, dying and perhaps delirious at Dos Palmas, must have revealed to the prospectors there that he had sent Tom a map.

That is the story of Slim's lost gold as Tom Clark told it to Ed and Earl in 1938. Remembering it some years later, there was only one factor unclear in their minds. While they are quite certain that, since Slim identified it as a regular watering place, the point from which he started when he made his strike was Tabaseca Tank, they feel it possible it could have been the Coyote Holes. The Coyote Holes, holding water in the wet seasons, lie over the summit from Chuckawalla Well and two or three miles west of Martin Augustine's, on the way to Canyon Springs. If the Coyote Holes should have been Slim's starting point—which I doubt for a variety of reasons—it

adds 20 miles to the trail which must be searched.

So far as I know, the story of Slim's lost gold has never been circulated or published. So far as I know, until very recently, only Tom Clark had attempted to relocate it. The question of its authenticity, of course, must rest entirely upon the worth of Tom's word—which cannot be corroborated. Even then, the facts he possessed were only those which a dying man had recalled about a country totally new and strange to him.

Nevertheless, I am so certain of the existence of this gold and the possibility of locating it that for years I have deferred writing this story until I had opportunity to search for it myself. Largely, my faith rests upon the character of Tom Clark as affirmed by those who knew him. He was an educated man, and he must have been a remarkable person. Both Ed and Earl emphasized his lifelong honesty. Al and Arlena Combs, now of Calipatria, who were Tom's neighbors and friends at Quien Sabe Point, are even more positive.

"If old Tom Clark told me anything," Al said, "I would just lift up one hand and swear it was true."

Arlena nodded agreement: "He was a truthful old man."

A second point is that the occurrence of the gold as described was logical and possible.

"A lot of placer in this country occurs right on the vein," Ed Rochester explains. "The vein erodes with the country rock. Sometimes it is softer and erodes faster. Then, if the wind is an erosion agent, much of the smaller, lighter stuff will blow away and semi-concentrates would be ready to dry wash right there, maybe on the top of a ridge or a hill."

But the feature of this story which has intrigued me most is that if the gold does exist, it exists in a definite area of limited extent, and there are clues to its location that can be traced out—an Indian trail crossing a ridge or elevation where very red dirt is found.

Every locality named as a guide to the gold—Dos Palmas, Tabaseca Tank, Canyon Springs, Coyote Holes and Chuckawalla Well—are watering places along the old Bradshaw Trail, mostly near Salt Creek Wash. The Bradshaw stage and freight route was opened between Dos Palmas and the Colorado River in 1862, at the time of the La Paz, Arizona, gold rush, and was used intermittently between that time and World War I.

It still can be followed its full length

by four-wheel-drive vehicles and for considerable portions by conventional cars. The area north or south of it where the gold could possibly be located is relatively narrow. There are only a certain number of Indian trails through here, and the trails can cross only a certain number of elevations. Looking at a map and tracing out Slim's course there, it seems a simple thing indeed. One trip, really, should do it. Pick out the right Indian trail and follow it to the gold.

Well, at last Lucile and I started out to hunt for Slim's gold. So far we have made three expeditions into that small area we had laid out on the map. Even with the aid of old government maps, it took two trips to familiarize ourselves with the landmarks and locate Tabaseca Tank. We rediscovered the fact that even a small desert area—on a map—expands astronomically when you actually enter it. The little oval in which the gold must be located actually turns out to be a vast maze of hills, ridges, canyons, mesas and washes. And we have located the beginnings of two Indian trails which leave Tabaseca Tanks in approximately the right direction, and a possible third. They had been so badly eroded that it is going to be difficult to follow them now.

Logically we should set up camp at Tabaseca Tank for weeks, if necessary, and comb the country between there and Dos Palmas on foot. We should like to do so, but a situation which the oldtimers never had to face makes that impossible.

The southern edge of this country where Slim found his gold is serrated by the boundary of still another Navy-expropriated closed zone—the Camp Dunlap Aerial Gunnery Range. The actual boundary, which steps its way erratically down the section lines, is not marked. You do not know, following the obscure roads and trails of the area, whether you are in the range or out.

Not that this is really important, since the Navy has been notorious in this region for literally over-shooting even the wide boundaries which they have appropriated for themselves, and which include the whole length and breadth of the Chocolate Mountains. Since most of us are interested in not being shot, rather than the doubtful satisfaction of knowing we are being shot illegally, the only safe time to hunt lost mines or anything else in this area, even on the still-public domain, is during weekends or periods when the range is not being used.

This precludes any protracted and systematic searching out of Indian trails from Tabaseca Tank. But it does not mean that Lucile and I intend to

give up the search. Rather that we have decided it's going to take a long time, and that we may even have to outwit the Navy.

But our preliminary expeditions have

convinced us that this country is big enough and its gold so well concealed that we can safely welcome to the old Bradshaw Trail any and all interested in hunting for Slim's lost strike.

TRUE OR FALSE

This is the time of day when you can settle back in the over-stuffed upholstery and exercise the brain while the body relaxes. Don't take this True or False puzzle too seriously—it is no crime to miss a few of 'em. But every *Desert* reader should take the test. If you get a high score it feeds your ego, and if you miss a lot of them that doesn't mean you are dumb—it merely means you still have much to learn about this old world. Twelve to 14 is a fair score, 15 to 17 good, 18 or over is *muy bueno*. The answers are on page 39.

- 1—Death Valley was given its name by Death Valley Scotty. True..... False.....
- 2—Asbestos comes from a tree that grows on the desert. True..... False.....
- 3—Gold is never found in quartz formation. True..... False.....
- 4—The route of the Kearny Army of the West was by way of Yuma. True..... False.....
- 5—Peccaries run wild on the desert of Southern Arizona. True..... False.....
- 6—Coyotes never attack a human being. True..... False.....
- 7—Translated into English, *agua caliente* means cold water. True..... False.....
- 8—The Great Salt Lake is below sea level. True..... False.....
- 9—The ferry at Hite, Utah, crosses the Colorado River. True..... False.....
- 10—Ironwood is too hard to burn. True..... False.....
- 11—The Bullion Mountains are on the Mojave Desert of California. True..... False.....
- 12—Uranium in U.S.A. is found only west of the Rocky Mountains. True..... False.....
- 13—The Yampa River is a tributary of the Green River. True..... False.....
- 14—The spectacular rock formation known as "The Great White Throne" is in Bryce Canyon National Park. True..... False.....
- 15—During its boom days, the principal output of the mines at Virginia City, Nevada, was gold and silver. True..... False.....
- 16—Shorty Harris is a name associated with the pioneering days in Death Valley. True..... False.....
- 17—On his historic trek to California in 1775 Juan Bautista de Anza brought his caravan of settlers through what is now Borrego Valley, California. True..... False.....
- 18—Indians whose reservation is near Peach Springs, Arizona, are the Hualpais. True..... False.....
- 19—Albuquerque is the capital of New Mexico. True..... False.....
- 20—Headwaters of the Little Colorado River are in the White Mountains of Arizona. True..... False.....

FAMED DESERT INN IS SOLD IN PALM SPRINGS

The famous Desert Inn, Palm Springs, California, first resort hotel at the desert playground, has been sold, it was announced.

Sale price was disclosed as \$2,000,000, although the new owners were not immediately revealed. The syndicate was represented by Gregson Bautzer, Beverly Hills, California, attorney, and Arnold Grant, New York City attorney.

Earl Coffman, co-owner of the Inn with his brother, George Roberson, said the buyers plan to invest more

than \$1,000,000 in decoration and improvements, including erection of commercial buildings along the business frontage of the 33-acre property in the heart of Palm Springs.

The property was to be transferred to the new owners at the close of escrow about June 30.

The Desert Inn was founded in 1909 as a small boarding house by Mrs. Nellie Coffman, mother of Earl and George. In 1908 Palm Springs had just 14 residents.

Property included in the sale is the Desert Inn, the Desert Inn Garage and the Desert Inn Ranch of 10 acres on East Ramon Road.

Dick Wick Hall

... of the Laughing Gas Service Station

Dick Wick Hall and Mark Twain would be names equally famous in Western literature, perhaps, were it not for Hall's untimely death in 1927. Though he entertained a national audience but briefly, the memory of Dick Wick remains fresh and endearing to the many desert travelers who knew him as the brilliant and waggish founder of Salome, Arizona. The seven-year-old non-swimming frog, with canteen strapped on its back, and his unique sub-title for Salome ("Where She Danced") are trademarks to the genius of Dick Wick Hall and to the Arizona desert, of which he is a part.

By WILSON McKENNEY

MARK TWAIN graduated from reporter of the Comstock lode to novelist of world-wide fame, while Will Rogers grew from an obscure stage comedian to world traveler and international ambassador of good will. But Dick Wick Hall, embodying some of the literary capacity of Twain and the droll insight of Rogers, remained in his wide-flung Happy Valley and was content to brighten the journey for pioneer desert travelers. Despite his preferred isolation, Hall's fame spread far and his stories became legendary.

Hall did not deliberately set out to become a humor writer. He once wrote "Im not an Author—Id starve to Death if I had to do This for a Living." His fame was born of a unique combination: his easy adaptability to his beloved Arizona desert, a native talent for keen observation and story-telling, a shrewd capacity as a small business man and a chance meeting with an influential editor.

Born in Creston, Iowa, March 20, 1877, Hall liked to say that "It was 35 below zero that day—that's why I've been looking for a warm spot ever since." Leaving his father's farm, he went to Florida to catch rattlesnakes for a laboratory, drifted from that to shoveling coal for a railroad. Reading about the Hopi Indians who danced with snakes in their mouths, he came to Arizona in 1898. For a time he tended garden at the Tewsberry ranch on the Tonto Rim. On a prospecting trip in 1904, he found his Happy Valley where he started Salome, Arizona, "without a dime."

Happy Valley was the name Dick Wick applied to the wide sweep of arboreal desert midway between notorious Hassayampa Creek and the muddy Colorado River. Bounded on the north by the Harcuvar Mountains and on the south and east by the

Harquahalas, its horizons are a sunlit backdrop of changing shapes and colors. Its sandy soil, receiving an annual rainfall of less than 10 inches, produces thin forests of mesquite, cats-claw, palo verde and the picturesque saguaro cactus. Running through it east and west was the rutted Emigrant Trail which brought overland travelers to the gold-laden gulches of La Paz, a trail which later became U. S. Highway 60-70, a primary artery of the Phoenix-Los Angeles run.

Establishing a prospector's camp beside the road, Hall ranged the colorful hills and canyons, filed on a few mining claims and a homestead. Noticing that the plodding teams and steaming automobiles stopped more and more frequently, he dug a well and the camp became a welcome oasis. He soon found that "being a friend to man" was taking more time than his



Dick Wick Hall as editor of the Salome Sun and dispenser of Laughing Gas, with the famous frog that never learned to swim.

mining job—"but out here time is the thing we have most of." It was an easy shift for the miner to become owner and operator of the nation's first Laughing Gas service station, followed soon by additional duties as host at the Blue Rock Inn.

As the little enterprise prospered, Hall needed a name for his oasis. He recalled that a teamster drew his wagon up to the lonely Hall shack and hopped to the ground. It was a hot day and the teamster's wife, who had removed her shoes while riding, descended from the high seat with his assistance. But when her bare feet touched the burning sand, her agile dance caused the men to convulse with laughter—until she recovered her shoes and hurled them at the unsympathetic spectators. From this incident, Hall decided to name the place Salome, "Where She Danced." He painted thin twisted



THIS IS THE LAUGHING GAS STATION
 WHERE WE SELL GASOLINE $\frac{1}{2}$ ILE AND TAKE YOUR MONEY WITH A SMILE—
 OLD ROKEFELLER MADE HIS PILE — AND MAYBE WE WILL — AFTERWHILE
 WE ARE HERE TO FILL YOUR TANK AND GET YOUR MONEY IN OUR BANK —
 SO STOP AND SEE US AS YOU PASS — FILL YOUR TANK WITH LAUGHING GAS.
 YOU DONT HAVE TO CROSS THE TRACK WHEN YOU WANT TO SPEND YOUR JACK —
 DRIVE RIGHT UP WITH YOUR OLD BUS AND LEAVE YOUR MONEY HERE WITH US
 YOU WILL GET YOUR DOLLARS WORTH IN GASOLINE OR ELSE IN MIRTH.
 WE WILL TRADE YOU ANYTHING — MINING STOCK FOR A DIAMOND RING—
 FIFTEEN ACRES OF SAGE BRUSH LAND FOR AN OLD CALLIOPE SECONDHAND
 FIVE NEW TIRES WE WANT TO SELL— CANNED TOMATOES AND BLACKBERRY JELL
 ICE CREAM, SODA AND ALMOST BEER— ACETYLENE WELDING DONE RIGHT HERE
 SALOME WATER — PAINTED JOKES — WILD GOAT GLANDS — GOOD-BYE, FOLKS

dancing figures on perpendicular panels and added the crude lettering "Welcome, Tourist, to SALOME—Where She Danced and Never Moved Her Feet" and placed them along the road. Later, probably as an afterthought, he added small signs at the bottom bearing the legend "All the Bumps and Curves Are Not in the Road."

By 1920 Yuma County, as big as the state of New Jersey, had only one city and it was Yuma, the county seat, at the junction of the Colorado and the Gila. A half-century earlier the northern part of the county held great promise but when gold disappeared so did Ehrenburg, La Paz and other thriving gold camps. All of western Arizona's wealth and political influence centered in Yuma. When Hall made the rugged 240-mile round-trip to Yuma to ask the county supervisors for road appropriations to help Salome his request was ignored. He went home seething with anger.

Unearthing an ancient mimeograph machine and an equally battered typewriter, Dick Wick launched publication of the *Salome Sun*, an 8½ by 14

sheet printed on both sides. It was to be the newspaper of the neglected north country—but from the very start most of its space was taken in uproarious disdain of the politicians of "Yumar-esque" county. Unconventional and unrestrained, Hall pecked away at his typewriter between customers at his service station, issuing a new edition whenever he felt the urge. His campaign was brilliant and unrelenting but there is no record to indicate that he accomplished his primary purpose of getting good roads for his area.

Though there were probably not more than a dozen readers around Salome, the fame of the *Sun* spread fast. Hall would place a copy in each car that stopped at his gas pump and the passengers, who found themselves chuckling over the witticisms, spread the story of the humorous philosopher who sold laughing gas in the desert. Gradually the localized political slant gave way to yarns, jingles and outright promotional plugs for his hotel, garage and service station—all with a typical Hall style of spelling, grammar and punctuation.

Thomas Masson, an associate editor of George Horace Lorimer's *Saturday Evening Post*, was traveling west to visit some important *Post* contributors when he stopped at Salome. He read a copy of the *Salome Sun*, examined the facetious placards at the Laughing Gas station with growing interest and was captivated by Hall's droll charm. He asked Dick Wick to write some material for magazine publication. The *Post* in 1925 was printing 220 pages a week and was the largest and most influential magazine in the country.

The first article, "Salome—Where the Green Grass Grew," was published in the *Post* January 3, 1925. With the story appeared a photograph of a three-foot plaster figure of a frog, complete with a prospector's canteen strapped to its back. The same green statue—or its logical offspring—still stands in front of a cafe in Salome. Hall's jingling verse about the frog launched him as a humor writer of great promise:

"I'm Seven Years Old and I Cannot Swim—

*So don't Blame Me for Looking Grim.
When a Frog has to carry a Big Canteen*

*And Water his Back to Keep it Green
And Prime Himself if he Wants to Cry*

When His Belly gets Burned with Alkali,

Where Grass Grows Brown instead of Green

A Frog can't Help but Feeling Mean.

... I'm an Old Bull Frog—and Dang My Hide

I Can't Swim cause I Never Tried."

Shortly after the story appeared, a newspaperman went to Salome to interview the frog and reported this monolog by his "Father-In-Law":

"Yes, it rains here sometimes. We had a big rain here in the spring of 1904. My frog likes to sit around and hear folks talk about it. That was before his time and what had been done can be done again, so he is living in hopes that he may yet learn to swim before he dies. Folks that ain't been born here think my frog is a joke but he is the livest frog you ever saw. The tourists have fed him so much that he is fat—weighs over 17 pounds now—but he is good natured in spite of it, considering how dry it is here. He sits around daytimes watching the sky for a cloud and the first time he smiled was the day after the Fourth of July when there was a big clap of thunder and everybody thought it was going to rain."

The "Green Grass" story described

Dick Wick's efforts to grow a little patch of lawn, the frog's valiant efforts to keep the rabbits and quail from eating it and the fight with coyotes which ended in jailing the writer.

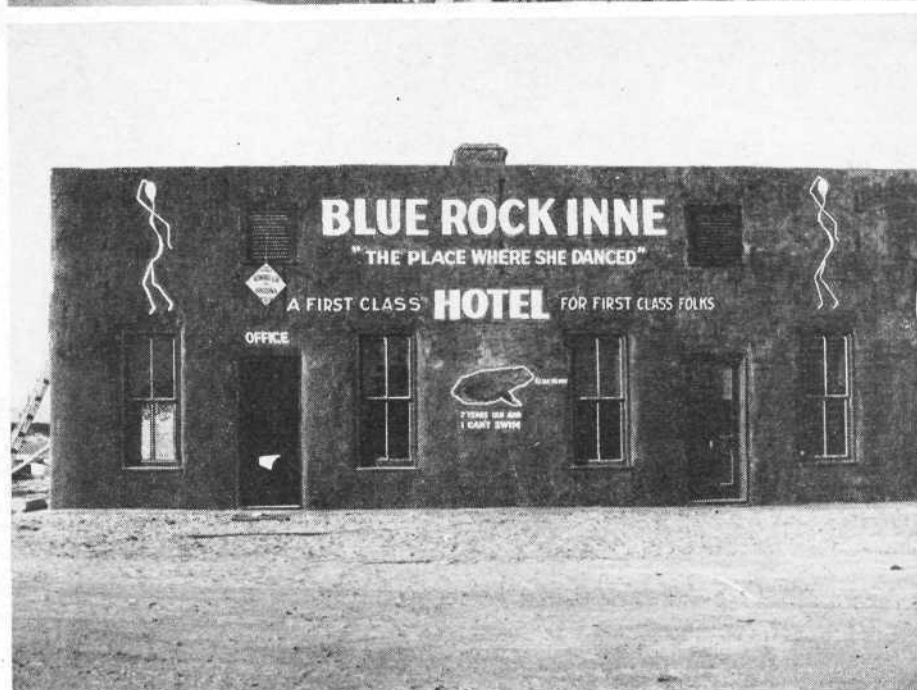
Other stories which appeared in print intermittently until October 9, 1926, were titled: "Arizona Alibi," "Banking As Is Banking," "Chloride Jack," "Gallivanting Jaime Vieve," "High Horse and Low Bridge," "My Mike Mille" and "Who's Loony?" Obviously, all were wildly imaginative and ludicrous. While he drew characterizations from his neighbors and associates with rough good humor, he never made them appear either pious or profane.

The unpolished rhyming jingles which Hall used in introducing his famous frog were characteristic of many of his best pieces. One, which appeared in the *Sun* and which he is said to have quoted orally as customers rolled in, was:

"Drive right up in your old Tin Lizzie, lift up the hood and I'll get busy. Our laughing gas is sure some fuel, it smiles at miles and kicks like a mule. Your tank's half full—what shall it be? Shall I fill 'er up or give 'er three? How about water and a little oil? Better take some—see the radiator boil? How about springs? Don't you need a tire? Further ahead they'll charge you higher. If there's anything else you need today, buy it now 'fore you drive away. If you don't want to buy, just say Hello and give us a smile before you go. We're always glad to see you here and we'll give you a laugh for a souvenir."

Hundreds of copies of the mimeographed *Sun* were passed along by tourists. Many travelers said they purposely chose the route through Salome in order to meet Dick Wick Hall. With publication of the *Post* stories, additional publicity appeared in many newspapers and magazines. *Sunset* used a Hall biographical sketch with pictures. The old *Literary Digest* in 1925 quoted the following piece by Hall from the *Standard Oil Bulletin*:

"Salome — Where She Danced — was first found by Dick Wick Hall in 1904, with a Population of One, consisting mostly of himself, Plus some Faith and a Good Imagination. For many years the town prospered and has an Average Annual Growth of 100%. The population in 1923, after 19 years, being Just 19 People. Something went Wrong in 1924, and there was No Increase, but in January, 1925, Jack Ewing and his Wife were Transferred to Clifton and Alec Vaughn, with a Wife and Two Children, came to take charge. The Two Children Saved the Reputation of Salome, mak-



Above—Dick Wick Hall and his "gas buggy" in front of the Laughing Gas Service Station. He also owned the garage next door.

Below—Blue Rock Inne was Dick Wick's hotel. He often referred to it as the hostelry in which travelers stayed while he sent their checks to eastern banks for the cash.

ing the Population 21 and Allowing it to Catch Up Again with the 21 years since Salome Started to Dance.

"The Principal Industries of Salome are Selling Gasoline to Tourists, Mining, and Getting Its Name in the Papers. Salome Makes a Lot of Noise for a little Place, but it has to Do It, otherwise a Lot of People might go Right on Through without knowing it."

At one time Hall was president of Arizona Apache Mines Company, with a board of seven men, an authorized capital of \$500,000 and main offices in Salome. Some Arizonans who knew

the mineral wealth of northern Yuma County assumed that Hall and his associates were reasonably successful at mining. Others, who may have been envious of Hall's new fame, suggested that Dick Wick's mining operations were pretty well confined to stock promotion. Though there is every evidence that Hall was an energetic business man and that he used his writing talents shrewdly, he was always at heart a kindly man and a wise philosopher. He once acknowledged that he had made considerable money at times and that he had traveled widely and



"I'm an Old Bull Frog and Dang My Hide I Can't Swim 'Cause I Never Tried."

spent time in the big cities, though he added slowly:

"But I weary of it after a time and come back to Salome, to the mind-resting quiet, the soul-satisfying peace, and the vibrant mysteriousness of the desert. When tourists sympathize with me for living in this humble place, they don't know how sorry I am for them, knowing, as I do, that I have found something for which they are still seeking. The average person in a large town gives up so much and gets so little out of life. I wonder what it all leads to—and the desert is a wonderful place to do a lot of wondering in."

Dick Wick had reached the peak of his popularity when he died suddenly in 1927.

His daughter, Jane, became a successful fiction writer. His brother, Ernest, still lives at Salome and carries on Dick Wick's interests in Happy Valley mining properties.

The humorous placards and crude signs around the station are stained and dusty, but they remain undisturbed. The rutted trail which once passed his door is no longer used. A new paved highway passes 100 yards to the south. But Dick Wick's spirit remains unconquerably bright and gay. That spirit is kept alive by the Mountain Lions Club of Salome and Wenden with an annual Dick Wick Hall Day. And there is the grotesquely grinning statue to a seven-year-old frog that never learned to swim.

Most significant are the smiles of reminiscence of hundreds of people who can still bring a yellowing but cherished mimeograph sheet out of a hideaway and recall Dick Wick's cheerful jingles and his philosophy of contentment.

California Fish, Game Group Lists River Angling Regulations

Fishing regulations for the Colorado River for 1955 have been released by the California Fish and Game Commission. The new rules apply to the land and waters in the entire drainage basin of the river in California, including sloughs, lakes and ponds and the waters diverted for irrigation or other purposes, except the waters of the Metropolitan Aqueduct, the All American Canal west of the Pilot Knob Wasteway and water entering California from Mexico.

Although angling is permitted at any time of the day or night, an angling license is required of all fishermen.

* * *

License Provisions: Any person fishing from a boat or any other floating device on the Colorado River or adjacent waters where such waters form the natural boundary between California and Arizona, must have in possession a valid angling license issued either by California or Arizona.

* * *

Special Use Permit: In addition to California license must carry an Arizona use permit, and the holder of an Arizona angling license must carry a California use permit. With these permits and the proper license, fishing is allowed from a boat in any portion of the above waters, and entry permitted from either state. Fee for the use permit is \$2.00.

* * *

Fishing from Shore: Persons fishing from either shore line must have in possession an angling license issued by the state having jurisdiction over the shore. A use permit is not required unless the angler embarks from the shore.

* * *

Sale of Use Permits: Special Use Permits can be obtained from authorized license agents, in either state, or from the offices of the California Department of Fish and Game.

* * *

Angling Methods: As used in Colorado River Area regulations, angling shall mean the taking of fish by one line with not more than two hooks; or

by one line and one artificial lure or two flies. The line may be held in the hand or attached to a rod but must be closely attended. No person shall fish with more than one line. Hooks and lures shall be so used that the fish voluntarily take them or attempt to take them in their mouths. It is lawful to take fish from either side of any dam in this area.

Carp may be taken with spear or bow and arrow. Persons taking carp in this manner may not have any other type of fishing equipment on their person or in the boat. This method of taking carp is illegal within one-half mile of any boat dock, swimming area, or other place people are concentrated.

Bass: No closed season. Daily bag and possession limit: 10 fish regardless of size.

Catfish: (all kinds). No closed season. Daily bag and possession limit: 10 fish regardless of size.

Trout: No closed season. Daily bag and possession limit: 10 fish regardless of size.

Mullet: No closed season. Daily bag and possession limit: six fish. May be taken by hands, hook and line, or dip nets not over six feet in diameter.

All other species: No closed season. No bag or possession limit, but no fish shall be wasted and no fish taken under a sport angling license shall be sold.

Frogs: June 1 to November 30. Daily bag and possession limit: 12 frogs. May be taken day or night with artificial lights, spears, or gigs. The use of hook and line, explosives, firearms, nets and traps is prohibited.

Bait: It is unlawful to use for bait or transport or possess for such purposes any freshwater fish in the Colorado River Area except such kinds as are native to or taken from waters in this area, or obtained from an authorized bait dealer. No trout, bass, catfish, or portions thereof shall be used for bait. Use of goldfish for bait is prohibited.

Fishes for bait may be taken with a dip net not more than six feet in diameter or with a trap not over 24 inches in greatest length nor more than 12 inches in greatest depth or width. No seines shall be used.



*Movie Street in Sedona has furnished the setting for many of the westerns.
Photo by Color West.*

Sedona is Our Home Town...

You've seen it in many movies, but you probably didn't know it was Sedona, Arizona, where the beauty of mountain and desert mingles to form a haven of red rock and pine. Here is the story of some people who have decided that this is the finest place on earth—and how they make their living where there are no industries, no city streets and no desire for either.

By ED ELLINGER

IT WAS eight years ago that I discovered Sedona and it was with a feeling of great finality that I settled down to make it my permanent home. Perhaps it was because there was such a contrast with the paved city streets where I had been brought up. But it must have been more than that because there are many places in this western country still unencumbered by city streets. Perhaps it was the compelling beauty of the bold red rocks set off by the ever-green freshness of pinyon, pine and spruce—the place where the Arizona desert of the south meets the mountainous north country

with its rugged peaks and towering ponderosa pine.

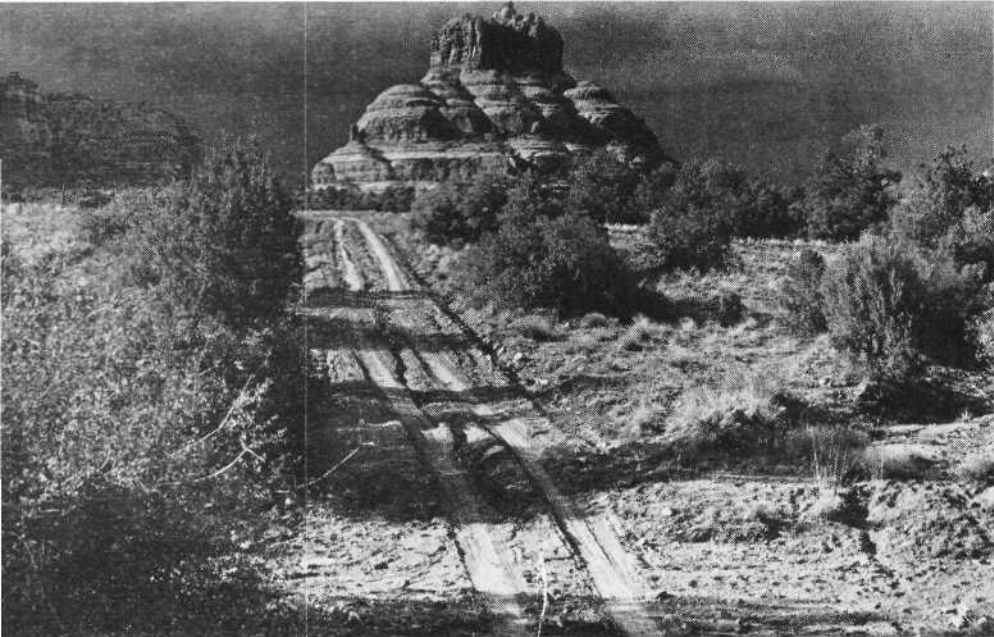
The village of Sedona lies at the entrance to Oak Creek Canyon, which leads to Flagstaff, 39 miles to the north. It extends along the banks of a tumbling mountain stream at an altitude of 4300 feet. It has a temperature range perfect for raising apples, peaches, apricots and pears, and the creek provides ample water for the irrigation. In fact it is possible to grow just about anything in this year-round climate. The winters are mild and the summers pleasantly warm. The thermometer may reach the 100-degree

mark at times, but the cool mountain air comes down the canyon at night. We invariably seek the comforting warmth of a blanket by bedtime. The air is dry and exhilarating, with none of the discomfort associated with humidity.

The last eight years have brought many changes to our little hamlet—changes reflecting the demands of an expanding population of new settlers who also have discovered Sedona. It is attracting interesting people—some plain folks like most of us, but also a fair share of well-known artists, writers and photographers.

Doctor Antoinette Smith is an ex-English professor who found an environment in Sedona to which she was attuned. She conducts a small but growing class in free lance writing and sells real estate in her spare time.

Carl Williams is another native who felt the forceful urge of Sedona. It



Above—Storm clouds form a dramatic backdrop for Bell Rock, one of Sedona's colorful rock formations. Photo by Color West.

Below—New home of Dr. H. H. Nininger's Meteorite Museum in Sedona. Photo by the author.

was fortunate for us he did because he is a professional well driller; brought in his well rigs and started to drill. He struck pure water at 600 feet and that did more to start the land boom perhaps than anything else. Now there are over 50 deep wells and more than enough water for domestic use.

The other day I stopped to see Randolph Fleck, who operates a neat little rock shop in town. I was curious to know how he had landed in Sedona because I knew that he had been a hotel operator in the East. He told me

that he came through Sedona one day and decided to stay.

"It was two years ago," he said. "My wife and I were having breakfast in our trailer along the road. I asked her how she would like to stay in Sedona for good. It startled her at first and she wanted to know how we could earn a living. Guess I hadn't thought much about that end of it, but I happened to look down at the table and the sun was shining sort of pretty-like on a few rock samples we had bought in Phoenix. So the idea hit me that

we'd open a rock shop. Didn't know a thing about it then, but it's worked out fine for us."

Now the Flecks have a prosperous little business of which they are rightfully proud. They travel during January and February and visit mines all over the Southwest and pick up new specimens to replenish their stock.

The problem of earning a living is one of serious consideration to those contemplating a move to Sedona. There is no industry of any kind and little hope for any. But man is ingenious when he wants something badly enough, and there is a quality in the marrow of all of us which needs a certain amount of prodding to bring it to the surface. Maybe the desire to live in Sedona will accomplish the purpose.

Actually Sedona is not a rich man's paradise for retired people, but rather a place which inspires creative people to find a way of life and, in many cases, a different way of life than they have known before.

Valenty Zaharek is another example. Valenty contracted polio after World War II and was flat on his back in a mid-western hospital for over a year. The doctors gave him little encouragement, but Valenty wasn't satisfied with a negative answer. He bought a car which could be operated without the use of his legs and headed west. After a year or two of wandering around from place to place he finally came to Sedona and built a house. He did most of the work with his own hands. I have a picture etched deep in my memory of Valenty propped up on his crutches, applying the final coat of stucco.

That was several years ago. Since then he has developed a successful one-man business. He designs and makes the models of an exciting line of ceramic animals and Indian-inspired ash trays and planters in addition to special contract work for varied types of wood carving. He does all his selling himself and takes to the road periodically in his panel truck. The business is a result of a wood carving course he took while he was in the Army and it is now providing a substantial livelihood.

I went to see Valenty the other day to learn how he is getting along. He greeted me with his usual friendly smile, then invited me to look at his latest venture into ceramic jewelry. It was a beautiful new line all laid out and ready to show to his customers, and the orders had already started to come in.

Dr. N. N. Nininger and his wife, Addie, are fairly recent arrivals in Sedona. The doctor is one of the world's recognized authorities on meteorites. He has spent the better part

of a lifetime acquiring a priceless collection of these metallic objects from out in space. His treasures are attractively displayed in a new museum in Sedona. The doctor is available to explain the wonders of the universe and to answer questions of the many visitors who come in to look around.

One day while I was in the museum I asked him if his knowledge of scientific matters tended to make him an atheist. His reply:

"Quite the contrary, the more I know of Nature the surer I am of a universal power which controls everything. Perhaps the use of the word God explains it better than anything else I can think of."

The motion picture industry has been quick to appreciate the colorful background of this unusual country. They have been making westerns here for many years. "The Broken Arrow" with Jimmy Stewart, "Drum Beat" with Alan Ladd and "Johnny Guitar" with Joan Crawford and Sterling Hayden are the pictures filmed here most recently. There is much fun for all of us when the movies come to town. It helps everybody's business and also means employment for local residents who are used as extras in the exciting game of cowboys and Indians.

Sedona offers a wide diversity of activities including an active Chamber of Commerce, a Lions Club, a Garden Club and even an amateur theatrical group, the "Stage Coach Players." They have an outdoor theater and put on western thrillers, when summer brings those cool starlit evenings.

There are several attractive lodges in the canyon above and a growing number of modern motels to accommodate visitors. Good food is also available at several medium-priced restaurants. Land may be purchased in small plots or in larger acreage. Actually land isn't cheap because most of it belongs to the Federal government and is not for sale. But there is enough for everyone at the moment and more than enough water for all domestic use.

Actually the town and the surrounding area are growing because this is a place to live year-round. Not a fashionable resort type of place, it is just a friendly community of people who are happy to live in the midst of such exquisite beauty in a climate which leaves little to be desired.

*Top—Valenty Zaharek with woodcarving to be used in coffee table.
Photo by the author.*

Center—Dr. H. H. Nininger displays huge collection of meteorites. Photo by the author.

Bottom—Randolph Fleck in his rock shop. Photo by the author.





Wagon wheels half-buried in Nevada's Forty-Mile Desert.

Rock Hunting

Along Pioneer Trails

By NELL MURBARGER
Photos by the author
Map by Norton Allen

in the Trinities

IT ALL STARTED when Ed Green told me there were opals in the Trinity Range, not over 15 miles from Lovelock, Nevada.

I knew for certain that if there was an opal, a fossil or any other kind of a rock for that matter — Ed Green would be the person most likely to know about it.

Born in the old mining camp of Lewis, near Battle Mountain, Ed moved to Lovelock Valley about 60 years ago. During those years he has punched cattle and hunted wild mustangs, driven stage, prospected in nearly every canyon in the Trinity and Humboldt ranges, helped launch half-

a-dozen boom camps and owned and operated many mines.

My acquaintance with Ed goes back several years — and the tips he has given me for feature stories have always been good. So we made a date to go to the Trinities.

It was one of those custom-built mornings — clear, a trifle chilly and bristling with promise—as we headed out the Lone Mountain road toward the long brown line of hills edging Lovelock Valley on the west. From beneath a tarpaulin in the back of Ed's truck issued the cheerful, half-muffled rattle of canteen, grub box and prospecting picks. Beside us in the cab

rode our rockhound friends, Nellie Basso and eight-year-old David.

As our road took its way through long lanes of huge old cottonwood trees, across brimming irrigation canals and past level fields of green alfalfa, it seemed to me I had never known a desert oasis more intensely beautiful than this Lovelock Valley!

I knew I wasn't the first to entertain this thought. While irrigation, here, has been a development of the past 50 years, the natural bounty of this wide valley has delighted men's eyes since wagon wheels first broke the crust of the Great Basin.

This was the Big Meadows of the emigrant trains—one of the most anticipated campsites between the fertile

As Americans pushed westward along the Emigrant Trail, paused at cool Big Meadows, then plunged into the vicious Forty-Mile Desert, they paid little attention to the jasper, obsidian and opal, the tufa domes and the Devil's Postpiles along their route. Today, from a well-settled West, modern Americans travel these same trails, but without hardships, seeking relics of those early days and the gems the pioneers missed.

valleys of Utah and the east flank of the Sierra. Here, in the midst of luxuriant forage, plentiful water and cool shade trees, weary wagon trains paused to recoup the strength of their people and animals, and to prepare for the hazard-fraught crossing of the Forty-Mile Desert, lying ahead.

Grass, to provide sustenance for mules and oxen, was cut; water barrels and kegs were filled and drought-shrunken wagon wheels soaked to tighten the tires. Even to the best-equipped, the Forty-Mile loomed as a spectre of madness and death, and I found myself wondering how many more emigrants would have fallen by the way had it not been for the advance succor provided by the Big Meadows of Lovelock Valley.

We had left the watered flatlands now; had passed the lambing sheds and pole corrals of a deserted sheep ranch and were worming our way ever higher into the dry treeless hills.

As Ed's truck rounded curves and bounced its way over the ruts, old prospect holes moved into view—one after

another—each telling its mute story of some forgotten miner and his hopes.

The low canyon we had been following, narrowed. Our road roughened, as the hills grew rockier and steeper and 15 miles west of Lovelock we topped the summit of the Trinities and Ed coasted the truck to a halt.

Beyond and below us spread a stark world of broken ranges and heat-washed flats, of gray sage and dim purple horizons—a wild, unpeopled vastness, in which it seemed as if a man might lose himself from the knowledge of everyone.

From our vantage point, a mile above sea level, we could trace the thin line of the road as it wound sinuously downward to Granite Springs Valley, 1200 feet below us in elevation and a dozen miles distant. Centering that dry expanse lay the glistening white oval of Adobe Flat, and beyond rose the tiered ranges of the Sahwawe Mountains, the Bluewings, the Nightingales, the Seven Troughs.

"The north end of Pyramid Lake lays about 40 miles straight west of

here," Ed was saying. "That little speck of green down yonder is Lowry Wells—the only water in this part of the range—and just beyond the Wells, a road turns north to the old mining camp of Velvet.

"And this," he concluded, "is where we leave the main road and take off for the opal fields!"

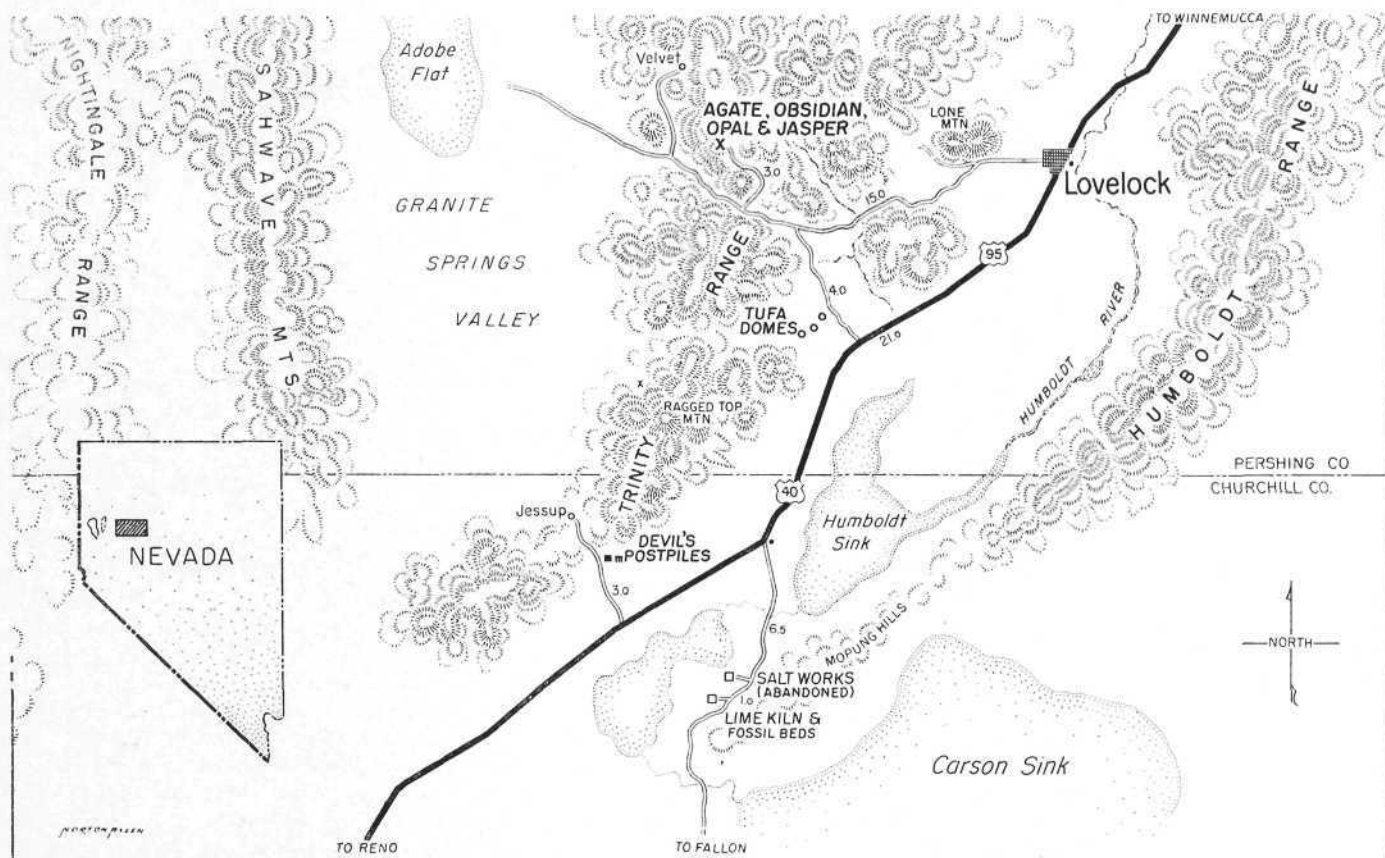
Turning to the right on a faintly-visible trail, we bounced over a low rise and down a northerly-trending slope for a couple of miles to the base of a conical butte topped by volcanic rock.

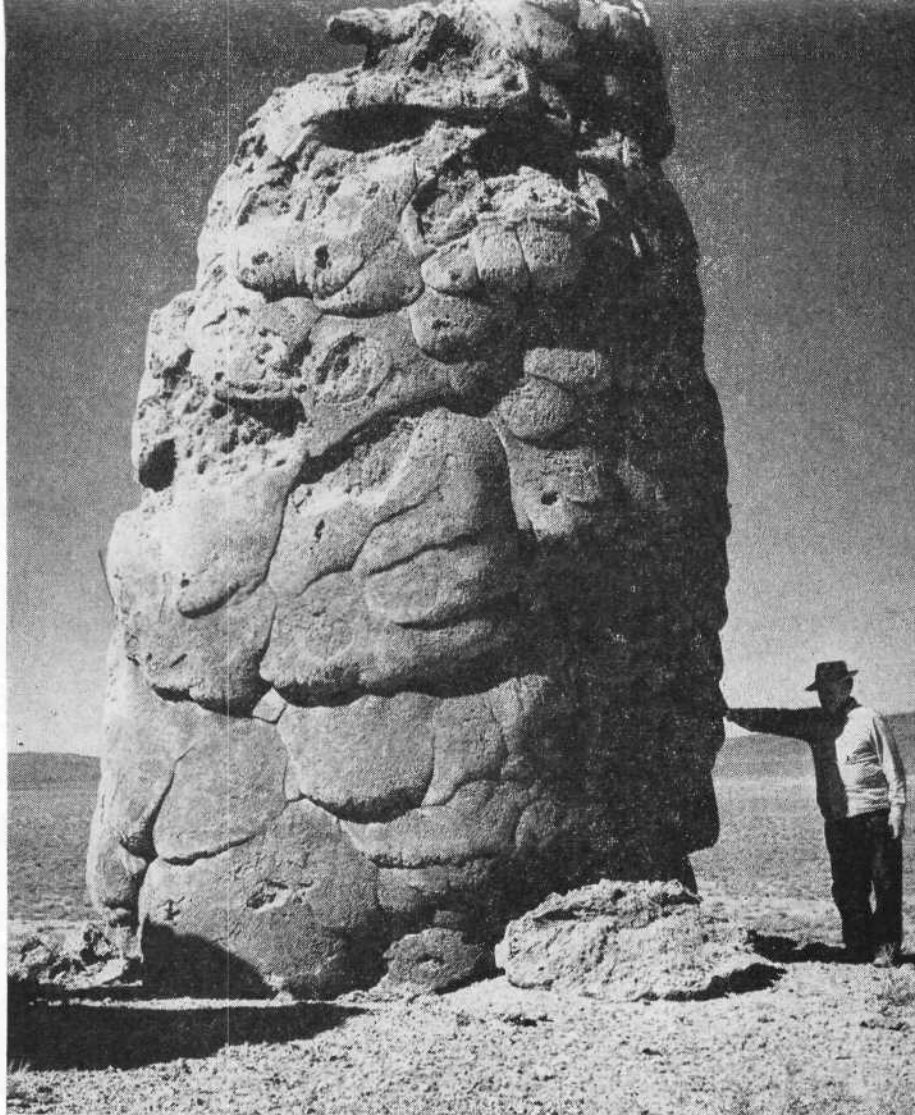
"This is it!" said Ed. "Try that ravine on the east side of the butte. And if you find any opal you can't lift, I'll come and help you!"

They weren't precious gem opals, but they were opals, nonetheless, and there were many of them.

They occurred as bladder-like fillings in a whitish-to-brown rock, probably of algal origin, but in which the calcium carbonate formed by the algae appears to have been replaced by silica and opal in such a way as to preserve all the organic details. From minute specks and paper-thin seams, those glassy-smooth fillings ranged upward to an inch in diameter and varied in color from opaque white to pastel yellow and pale blue. One specimen even exhibited a sky-blue face marked by a vivid crescent of darker blue.

Most of the rock carrying the opals was wholly or partially embedded in





Ed Green inspects one of the tufa domes which mark an ancient beach line of prehistoric Lake Lahontan.

the ground. One such piece, which showed an exposed area no larger than a teacup, proved to be as large as a water bucket, with nearly every inch of its surface studded with small specks of opal!

While none of the opals we found possessed any value other than as interesting cabinet specimens, jasper, from the same hill, was beautifully colored and agatized. Mottled in shades of buff and brown, some of the pieces were handsomely splotted with clear agate, while other specimens bore strong resemblance to beautifully agatized wood.

Climbing the butte, we found its eroded cap composed largely of glistening black obsidian, in a massive formation several feet in thickness. Adjoining this was a thick layer of gray volcanic glass which had been thoroughly prospected by some earlier comer, perhaps in a search for perlite.

From the obsidian deposit, we circled the top of the butte to its southwest side and there discovered a series of overhanging ledges, their under surfaces speckled thickly with strange reddish-brown nodules.

"Those are the petrified walnuts I

was telling you about," exclaimed Ed. "They're not really walnuts, of course. Nellie sent some of 'em to the State Analytical Laboratory at Reno, and they called 'em chert nodules. But, by golly, they look like walnuts!"

And they did! Hundreds of the nodules, detached from the ledge and scattered over the hill slope below, ranged from the size of a filbert to that of a small hen's egg. Mostly, however, they were about the size and shape of an English walnut and their brown surface was wrinkled in much the same manner.

"It was these nodules that led me to find the opals in the first place," Ed was saying. "I was hunting wild horses one day when a bad storm broke. I crawled under a ledge and figured I would stay dry till the rain stopped. While I was sitting there, waiting, I saw some of these nodules lying on the ground. I wondered what they were and began cracking them open. It was more fun than a picnic! Most of 'em had only a lot of radiating lines, inside; but in some there would be a nice little opal."

Gathering a quantity of the nodules for later sawing, we scrambled back

down the knoll to the truck. There we ate the good lunch Nellie Basso had prepared, loaded our respective rocks and discussed plans for that portion of the adventure still to come.

Returning to the main road, Ed retraced our route of that morning for three miles, after which he swung to the right on a trail that led down the southeasterly face of the Trinities and into a forest of strange tufa domes—each a graphic reminder of long-vanished Lake Lahontan.

Age of these strange domes must remain largely a matter for conjecture, since Lahontan was a dying lake long before primitive man first came to dwell on its shores. Born possibly 50,000 years ago as melting glaciers of the last great Ice Age spread a wide sheet of water over this land, the lake originally had been cold and sparkling, around 900 feet at its greatest depth. Two hundred miles in length and nearly 150 miles broad it had extended over a large portion of what is now northwestern Nevada and northeastern California.

When time and a moderating climate had brought the Glacial Age to its close, the shores of this great lake had begun to shrink and its water had grown brackish. With evaporation by sun and wind claiming further toll, the water had eventually become so saturated with mineral salts that the depositing of calcium carbonate, in the form of calcereous tufa, was begun.

Along some sections of Lahontan's shoreline (notably at Pyramid Lake), this tufa had been laid down as great bulbous monoliths, high and wide as office buildings. Elsewhere it had taken the form of a rough frosting on boulders and cliffsides; and here, on the southeast flank of the Trinities, the mineral-laden waters had formed these high, conical domes.

Walking over the sandy floor that separates these domes like stumps in a forest, we found specimens as much as 25 feet in height, with a base diameter less than half that great. From these granddaddy domes, the exhibit ranged down to little kindergarten domes, just getting nicely started when their algae-supplying waters vanished forever.

When sufficiently weathered, the larger domes showed semi-hollow interiors filled with strange, angular formations, crystalline in nature. But why the calcium carbonate composing the interior of the domes had taken this form, while on their exterior it had arranged itself in huge down-drooping white petals, not unlike sea-coral in texture and appearance, is a riddle that all our probing and conjecturing and subsequent research has failed to answer.

Leaving the enigma of the tufa domes still unsolved, we rambled on down the wash a couple of miles to U.S. 40, where Ed suggested that the day's adventure might as well include a visit to "The Devil's Postpile," just across the line in Churchill County. The proposal met with unanimous favor, and after several minutes' drive down the main highway we were again climbing into the Trinities, having turned to the right on a desert trail where a nearly-obliterated sign post indicated the way to Jessup, a mining camp that boomed briefly in the forefront of the century and still has a resident or two.

Three miles along this Jessup road brought us to the postpile. As a matter of fact, there were several piles spotted over an area of possibly 20 acres in extent. Comprised of pentagonal (five-sided) columns of hard brown basalt, each of the columns was as perfectly formed as though hewn by a master stone cutter. Some were straight as a telephone pole for their entire length of 12 or 14 feet; others were warped and twisted, as though the material of which they were formed had wilted while in the process of cooling and hardening. Each column was about eight inches in diameter, and the piles were corded and stacked for all the world like fence posts.

Like the tufa domes, these basaltic postpiles are something of a geological mystery; yet, their occurrence is not confined to any one part of the world. The famous Devil's Wall, in Bohemia; the Devil's Causeway and Fingal's Cave, in the Hebrides; the Devil's Postpile, now included in a national monument in California, and many other occurrences less well known, including this strange cluster in Nevada, are all formed of these strange pentagonal columns.

"I've always intended to come out and get a truckload of these posts for fencing my yard," said Ed. I remarked they'd be tolerably heavy.

"Oh, sure!" he admitted. "But once they were in place, think how long they would last! Why, I doubt if it would even be necessary to dip 'em in creosote . . ."

And I doubt it, too.

Retracing our way to the Fallon cut-off, Ed turned upon it, into the wide barrenness of Humboldt Sink and past a sign that warned we were embarking on a dirt road, not patrolled and impassable when wet.

Looking over that parched and barren waste, it scarcely seemed possible it would ever be wet again; or that it had known one drop of water since that centuries-ago day when Lake Lahontan had slipped into its final recession. Yet I could remember wet years

when this entire flat had shimmered with water in which clouds were mirrored, and killdeers, curlews and avocets made merry.

This, of course, had not been any residual water from Lake Lahontan, but only a transient accumulation from the canyons and overflow from the Humboldt River. But even such water as this seemed impossibly foreign to the parched and dessicated flat we were crossing.

This gaunt white waste, with its acrid crusting of alkali and niter, soda and salt, was the Forty-Mile Desert of Emigrant Trail days. Forty miles from water-to-water; 40 miles of heat and drought, disaster and death, where oxen and mules choked in their own dust, plunging and gasping for air,

falling and dying beneath their yokes and in their traces. Forty miles of Hell, where men went mad and women prayed for deliverance.

This was a land where Western history had been made. The Walker-Bonneville party had passed this way in 1834. Somewhere on the flat, our road had crossed their long-obliterated hoof prints. We had crossed, too, the invisible wheel ruts of the Bidwell-Bartleson group of 1841, the first emigrant train to take a wagon over the formidable Sierra. Through here had trudged the Walker-Chiles party of 1843, the Stevens-Townsend-Murphy party of 1844 and the Kern-Walker portion of Fremont's party of explorers in 1845. The Donner party of 1846 had toiled across this Forty-Mile Des-

Author examines basaltic formations known as The Devil's Postpile, near Lovelock, Nevada.





Builders of this ancient lime kiln on the edge of the Forty-Mile Desert, made their lime from fossil gastopods found nearby.

ert on its way to a rendezvous with death and immortality at Donner Summit. Beckwourth had traveled this same route; so had Sam Brannan, Abner Blackburn and marching legions of the unsung.

"When I first came to Lovelock there were lots of relics still laying along the old Emigrant Trail," Ed was saying. "Wagon wheels and tires, ox shoes, lengths of iron chain, wagon hubs, even iron stew pots. And bones! There were scads of bones—all sorts of bones."

About five miles from the north edge of the flat, we drew to a halt alongside a bleached scattering of rubbish and relics — not relics of Emigrant Trail days, but of a later era when visionary men had come into the Forty-Mile Desert to found the Desert Crystal Salt company and the town of White Plains.

White Plains had never been a large or important town, but it had boasted a station on the Central Pacific Railroad, a telegraph office, postoffice and a store or two. For awhile it enjoyed even the prestige of a newspaper—*The Churchill News*—which made its initial appearance March 3, 1888, and soon thereafter boasted "the largest subscription list of any publication in Churchill County."

In the scattered rubbish that marked the site of the old salt works, lay heavy planks, rendered porous and soft by the harsh chemicals of the flat, but still carrying the square-cut spikes that had

fastened them together. Here, too, were pieces of harness leather, black and dried, and brittle; buggy shafts, singletrees, a whipstock, fragments of dishes, mule shoes, several ponderous handmade wheelbarrows, barrel hoops, a pair of wagon wheels half-buried in the salt and lengths of iron pipe layered with great scales of rust. The low dikes of the old settling ponds were still traceable on the flat, and two uncovered wells were about two-thirds filled with greenish vile-smelling water.

Produced by solar evaporation of the brine, the salt from these works is said to have been among the finest that ever came out of the West, yet only a small percentage was sold as table salt—most of the yield being freighted to distant silver mills for use in fluxing the ore. The deposit, located about 1870, by Walter Smith, was still being worked when Ed came to Lovelock, but had been idle, he said, for around 40 years.

The day's last point of historical and geological interest lay a mile farther along the Fallon road.

"See those rocks over there?" said our guide, pointing to a conical affair about 300 yards to the west. "That's one of the oldest lime kilns in the state. First time I saw it, 50 years ago, it was already deserted and looked just the same as it does now!"

It was a strange sort of kiln. Constructed of flat stones laid in mud mortar, it was lined throughout with fire

brick and stood about 25 feet high, tapering from a base diameter of half that distance to barely five feet across at the top. The heavy iron door that had closed its fire box, still hung in place, on its rusty hinges.

"There's one thing I don't understand," said Nellie. "Why was the kiln located here? Where is any limestone to be quarried?"

Ed grinned. "Being a rockhound and fossil fan, you'll love this: They made their lime out of fossil shells from old Lake Lahontan."

Leading the way to a cut in a nearby knoll, he indicated a whole bankful of fossil gastopods. Snail-like in form and as much as an inch in diameter (although averaging about half an inch), the shells were perfectly preserved in every detail and packed so closely together there was scarcely room for any matrix between. In only a few minutes we were able to collect all the specimens we cared to carry away.

With our return to Lovelock, about supper time, our trip register showed less than 100 miles traveled in the course of the day's adventure.

As tangible evidence of our outing we had a whole series of new specimens for our respective cabinets — opals, jasper, obsidian, tufa, fossil shells, an arrowhead, a handful of square nails, a couple of old fashioned buttons, a purple bottle.

But, most important of all was our collection of history. No one could say how many thousands on millions of years of it we had collected that day — history that extended all the way back to that Plutonic era when our obsidian and volcanic glass was being formed, and the basalt postpile had begun cooling and separating into its honeycombed segments; history that touched on the last great Ice Age, the birth and death of a great inland sea and the laying down of calcium carbonates to form the strange tufa domes along its shore.

We had seen how the residue of that lake—its fossil shells and its salt—had been harvested and utilized by man in his conquest of desert mountains and white wastes; and, in fancy, we had walked in the tracks of the bearded emigrants, the men whose feet trod a desert waste, but whose eyes were fixed high on a shining dream.

It had been a good day, a great adventure. Even if the plebeian specimens we had brought back would never shake the scientific world, no man could appraise and no scales could weigh the wealth of intangible treasure made ours by this day in the desert hills.

LIFE ON THE DESERT

He Saw Only the Desert . . .

By FRED GLIMPSE

WE WERE driving north from Cameron, Arizona, to the Utah border when we saw the marks—deep cuts in the gravel beside the road zig-zagged now and then into the concrete where the black of scraped rubber showed clearly. Someone had blown a tire, and recently. A half-mile down the road we came upon a little house trailer, pulled off onto the shoulder and canted steeply to the right. It was hitched to an ancient, sun-faded pickup truck.

We stopped and walked back to see if we could be of assistance. There was no one in the truck or beside it, so we looked into the trailer. A gray-haired man was writing at a desk that sloped awkwardly. Apparently he hadn't heard us stop. At our "Good morning" he looked up in surprise, then smiled and came to the door.

"I see you've had a little trouble," I said, indicating the right wheel of the trailer.

"Oh, I suppose you could call it that." He smiled again. "My trailer seems to have a flat tire. At first I thought it was my truck. Then I stopped and saw the trailer leaning over like this."

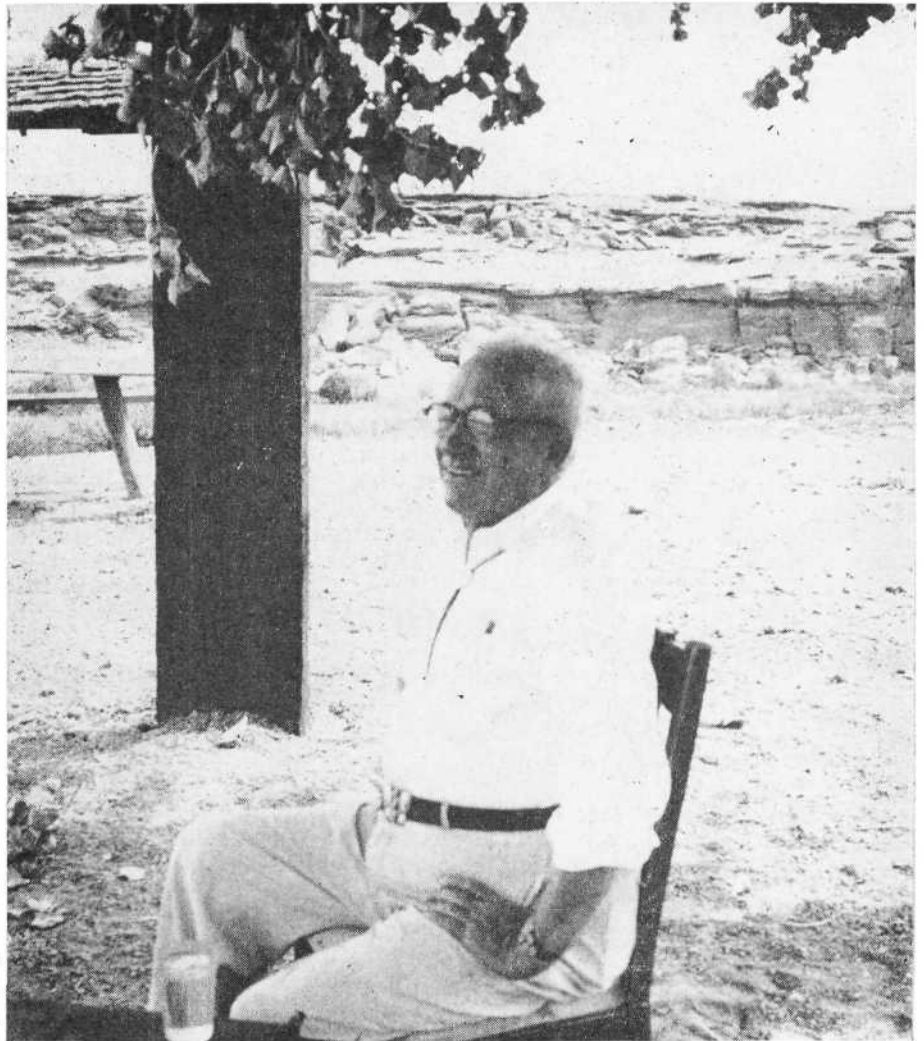
The trailer, bigger than the truck, must have whipped and swayed violently when the tire blew. I didn't quite see how he could think it was trouble with his truck, but said nothing. I stepped back and looked at the wheel, the rim bent and useless and the tire cut beyond repair.

"Well, that one's gone," I said. "I'll help you put the spare on. If you don't have a jack, I've got one that I think will work."

The gray-haired man shook his head. "I don't have a spare tire for the trailer. I've never thought much about one." If he was perturbed by the fact that he was stranded miles from the nearest garage, his calm face didn't show it.

I glanced at his license plate. Arizona. What in the world was an Arizonan thinking of traveling without a spare tire? We were only tourists from New York at that time but we knew that every desert traveler should carry at least one spare tire. Even at home where one is seldom out of sight of a town or a gas station we wouldn't

This engrossing tale of Shine Smith, missionary to the Navajos, was awarded first prize in Desert Magazine's 1955 Life-on-the-Desert contest. Here is a revealing picture of one of the most amazing men on the desert—and perhaps there is a bit of philosophy in this narrative that may be good for you and me.



Shine Smith, missionary to the Navajos.

think of going anywhere without a spare. Surely, in this country of great distances, being without one could be almost suicidal.

I suggested that perhaps the spare wheel from the pickup would fit. But no, the truck wheel was drilled for five lugs, the trailer wheel for four. The holes wouldn't line up.

How about unhitching the trailer, then? That idea didn't work, either. The angle at which the trailer had come to a stop had jammed the edge of the socket firmly under the ball of the

hitch. We heaved and tugged at it for a few seconds, then gave up. Maybe two stronger men could have separated them, but we couldn't. We'd have to go for help.

"If you want to lock the trailer and come with us, we'll give you a lift to the nearest garage," I offered.

"Oh, no, thank you. I have some work to finish." He indicated the slanting desktop. "I can get it done while I'm waiting."

"Water, then—or food?" Jan asked. "We've plenty of both."

He smiled again and shook his head. "I'll be all right, thanks. But if you're going over Navajo Bridge you might do me a favor and take a note to the lady who runs the trading post at Marble Canyon."

We said that we'd be glad to carry a message for him.

"I'm Shine Smith," he said, holding out his hand. "I'm pastor to the Navajos. A wonderful people, but poor, you know. They need so much. I've lived with them on the reservation for years."

We nodded, not knowing quite what to say. We knew nothing of the Navajos then except that occasionally we saw pictures of them herding sheep near some fantastically-shaped huge rocks. Problems? We weren't aware that they had any in particular. Fortunately, Shine Smith came back to the matter at hand.

"The lady at the trading post is a good friend of mine. She'll send out a tire."

He went back to the desk and wrote something on a sheet of paper that he handed to me. "Just give her that. She'll know what to do."

I glanced at what he had written: "Have a flat tire on my trailer—Shine." In one corner of the paper was a picture of a Santa Claus whom I took to be Mr. Smith surrounded by Indian children. "My Christmas party for the Navajos," said the caption.

"Wait a minute," I said. "Hadn't you better tell her the tire size?"

But from his expression it was obvious that Shine Smith didn't know that tires came in different sizes. I got down on my knees and examined the tattered rubber. Six hundred-sixteen. I borrowed his pencil and wrote that down together with the fact that the trailer needed a wheel drilled for just four lugs. That should be all the information the woman at Marble Canyon would need to send help to him. Still, we hesitated before going. In spite of the cheerful way he accepted his plight we felt guilty driving away and leaving him. The pickup and trailer were so tiny against the immensity of the desert.

"We'll get to Marble Canyon as quickly as we can," Jan promised him. "And I'm sorry that you've had all this trouble. It's too bad it had to happen."

But our new friend only smiled again. Adversity, it seemed, increased his good humor. "Oh, no, it's not too bad at all," he protested. "You see, I believe that nothing happens without a purpose. Now, if the tire on my trailer hadn't gone flat, you people wouldn't have stopped and I wouldn't have met you—and you've just con-

firmed my belief that there are lots of good people in this world."

Quite a philosopher, I thought. Nevertheless, and no matter how friendly the people who stopped might be, if I had a flat tire and no spare away out here in the wilderness, I'd be perturbed and unhappy.

I folded his note and tucked it in my pocket. We shook hands with Shine Smith and went back to our car. Before we started we looked back once at the forlorn little trailer and the battered truck. Jan waved, but he didn't see her. He stood beside the trailer, looking off across the desert toward the east. A flat tire was to forget; a bright morning on the desert was to enjoy.

We found the lady at Marble Canyon and she, too, was friendly and smiling. All the people in the desert seemed to be. She read Shine's note and assured us that she would get a new tire and wheel to him.

We thought about Shine Smith much after that, asking ourselves questions that we couldn't answer. How could he have spent so many years on the desert and yet be as unprepared for emergencies? Hadn't experience—his own or that of someone he knew—taught him how to get by in this hard, demanding land? How had he gotten along before this?

It was a long time before we got the answers, long after we ourselves had left the East and moved to the desert to enjoy life in the sun. By that time we'd read much of Shine Smith and his unselfish service to the Indians. Twice we'd seen a picture of him with his friends, both times with that gentle smile on his face. And we know now that it was Shine Smith not us who was in tune with the desert that morning up on Route 89. What seemed to Jan and me a great inconvenience was no inconvenience at all to him. Why hurry in a land where time means so little? Where we would have fumed with impatience at the delay, Shine Smith went calmly ahead with something else that needed doing. We were

For those who desire to send clothing or food for distribution among the Navajo Indians, parcels may be sent by mail or express to Shine Smith at Flagstaff, Arizona, or by parcel post to him at Cameron or Tuba City, Arizona. Such contributions are especially welcome just before the annual Christmas party which Shine stages for the Indians somewhere on the reservation each year.

concerned with the size of tires; he saw only the desert, bright in the morning sun. We would have worried; Shine Smith knew that people were good and help each other in this vast country.

Besides, why should he fill his head with trivia when he had a whole desert full of Indians to be concerned about?

New and Improved Products for Desert Living

Portable Camp Stove Uses Disposable Tank

A new portable camp stove using a disposable fuel tank is now on the market from the Turner Brass Works, Sycamore, Illinois. The Turner Camp Stove consists of a heavy-gauge fuel tank, an all-brass burner and valve assembly and a grid unit. Complete stove packs into an 11 x 5½ x 5½ (inches) metal carrying case which also serves as a windshield. Entire unit weighs only six pounds.

• • •

Automatic Tappet Stops Car Waste

An automatic mechanical tappet that can be used to do the work of a hydraulic tappet is now being sold by S-M Tappet Sales, P.O. Box 817, Dunedin, Florida. The new self-adjusting tappet can be used in any automobile or truck, whether or not it is equipped with hydraulic tappets, according to B.C. Skinner, general manager. It is said to assume perfect valve timing at all points of engine performance, give faster acceleration and stop waste of gas from incorrect valve closing.

• • •

Miniature of Dietz Ranch Lantern Made

The R. E. Dietz Company, Syracuse, New York, has introduced an electrified miniature replica of the famous Dietz kerosene ranch lantern. Compact in size and brightly enameled in fire engine red, the electric Comet is fashioned of stamped steel from original Dietz lantern dies. It stands eight and one-half inches high and is powered by two dry cell batteries. Both safe and decorative, the Comet can be lighted into use by a quarter turn of the wick handle. This new lantern can be used for home or shop, for youngster's or adult's lighting companion in fishing and hiking, as well as a source of emergency lighting.

HOME ON THE DESERT

When the Rains Fail to Come

By RUTH REYNOLDS

RAIN IN THE desert is a big event, and here in the Tucson Valley the summer rainy season begins in July. Traditionally it begins on San Juan's Day, June 24—which is usually rainless.

In the Yaqui village, which lies practically on Tucson's doorstep, a pre-San Juan's Day ceremony is observed each year, entreating the good Saint John to send rain on his day. But if no rain falls the Yaquis are resigned. They know—we all know, who live on the desert—that for rain we must wait—and wait.

Our gardens, planted in the spring, must often flower and bear fruit untouched by any drop of water from the skies. I've seen this happen year after year but it still seems a little incredible. Then when the rains do come, that seems even more incredible—as if Nature had achieved the impossible.

Desert rain! Surely it is more wonderfully wet than other rain. How clean and shining it washes the landscape! The scent of greasewood that drifts in from the open desert reminds me of something. Some pleasantly poignant association eludes me, until suddenly I remember—another day, another summer when it rained.

And now the miracle repeats itself: the clean-washed air, the greasewood scent. Small toads will come from underground along arroyos, and desert animals and plants will quench their thirst at last.

Gardening takes a holiday. For once there is no watering to do. I sit back and wait for the rain to come again. And it comes—over the mountains, in the foothills, downtown—but leaves the garden high and dry.

So, it's back to work — back to watering and to weeding and plant-feeding.

Weeding can be eased somewhat by weed killing chemicals. There are hormone types—2, 4-D and 2, 4, 5-T—to be used on broad leaf grasses or weeds and brushy growths respectively. And there is now on the market an applicator which sprays a ready-mixed formula on a spot the size of a half dollar, supposed to make weeding as safe and easy as taking a walk around the lawn.

The chemical I'm most grateful to is Arsenic Trioxide which can be used only where no vegetation is wanted.

Desert gardens often flower and bear fruit without a drop of assistance from the skies. Rain cannot be trusted, with the result that new methods of watering and feeding are constantly being tested. Mrs. Reynolds found that watering in a hurry might not be such a bad plan, but it all takes patience and a lot of trial and error experience.

Against the abominable Bull Heads (sticker weeds) it can be used effectively along curbs and in driveways where the monsters spring to life during the rainy season.

Flower beds and garden plots deserve more personal attention, and no real gardener is ever happier than when weeding a thriving garden. Not everyone can understand this. Even Ted used to say to me, "Must you do that?" when he'd find me on my knees among the zinnias or beans—having the time of my life—unless I was digging for a bermuda root that might run the length of a flower bed. Then I felt justified in asking him to cope with his grass that had escaped from his lawn. For our lawn is my husband's; our garden and flowers are mine. It is "division of property" that makes us both happy and gives us a chance to exchange services occasionally.

In return for a little spade work in the garden I'm willing to help him clean out a patch of crab grass or other wild grasses that are the lawn's worst enemies, coming perhaps from the manure it has seemed best to apply every third or fourth spring. However, now that the soil is built up, I—for reasons of my own—am in favor of commercial fertilizers only, for the lawn. They are available in many forms and analysis is required by law to be on every container or tag.

As booster shots about twice a summer Ted uses Ammonium Sulphate (20% nitrogen) or Ammonium Phosphate (20% nitrogen and 16% phosphorus) at the rate of four or five pounds per 1000 square feet, and the grass grows thicker and greener almost at once. They are applied on dry grass and then washed immediately into the root zone.

Always in watering he tries to avoid

too-frequent, shallow sprinklings that keep roots near the surface and allow grass to burn quickly in the hot sun. Twice a week, moderately heavy soakings seem best.

Surprisingly enough, there is such a thing as too much water, even in the desert. It is possible to over-soak the ground and leach plant foods away—down through crevices beyond the reach of roots.

Just how much and how often to water is almost an individual problem, as most of our soils are man-made and consist of varying amounts of top-soil, soil conditioner and fertilizers. Obviously those soils retain moisture best that are best conditioned with organic matter — barnyard manure, compost, leaf mold, peat moss.

This addition of organic matter is a must for all desert soils for they do not come by it naturally.

All our own yard came by naturally was calichi, covered thinly with a sandy crust of earth. But when we settled in Tucson we were concerned with other things—the sunshine and the warm dry air.

My garden has had, over the years, applications of peat moss, compost, manure, redwood shavings and probably a hundred pounds of coffee grounds—a full conditioning treatment to insure air penetration and water retention.

Still I have not found it easy to devise a perfect system of irrigating. A too-brisk flow of water will of course wash out the furrows and expose the roots of plants. Watering too slowly and too long can result in a poorly drained, water-logged garden, inclined to go to foliage.

It was quite by chance that I learned how tricky a problem this can be, and it took a 10-year-old to teach me.

While we were away on vacation one summer we left Dickey, who lives in our block, to do the watering. He was a conscientious and reliable child for his age. But the world is full of attractions to lure a boy away from routine chores. Not that Dickey neglected to water the garden, he just watered in a hurry.

Coming home after three weeks' absence, we found the water racing briskly along the garden rows and escaping to run in little rivulets across the driveway.

Dickey soon came running from the

baseball game in the vacant lot. He looked at the overflow with a guilty expression on his face! "Gosh, Mrs. Reynolds, I'm sorry."

"It's all right, Dickey," I told him. "It's quite all right." I had turned to stare at the garden that was loaded with beans and squash and tomatoes such as I had never been able to achieve. After thinking the matter over, I was convinced, and still believe, that drainage by Dickey's method of watering was best.

Since then I've tried to work out a compromise system—letting the water run more swiftly than was my custom but less swiftly than Dickey let it run.

This year I'm experimenting with a "soaker"—a hose with holes spaced a few inches apart. I have a 50-foot length of it laid, holes down, in the continuous furrow that forms the garden's irrigation system. As it extends only along half the rows, I shall be able to estimate its worth, according to results in each half of the garden.

So far I only know that it is the easy way to water. To begin with you don't have to do a perfect engineering job on the continuous furrow, and there is no strong flow to wash away small seeds before they come up. And it is always there ready to attach the hose to.

But if this easy way proves in the end unproductive, I shall probably revert to Dickey's free-flowing flowing method, for I still hope to repeat his tremendous success some day.

THE *Desert* MAGAZINE CLOSE-UPS

New honors have come to Nell Murbarger, author of this month's "Rock Hunting Along Pioneer Trails in the Trinities." The National Federation of Press Women gave her the nation's top award for interviews written by American women during the year for her *Desert Magazine* story of Mrs. Josephine Pearl ("Josie Pearl, Prospector on Nevada's Black Rock Desert," *Desert*, August, 1954).

The award-winning interview deals with the strange life of the colorful woman prospector of Leonard Creek and Winnemucca, Nevada, who owns and operates mining property.

Nell, who resides at Costa Mesa, California, and is known as "The Roaming Reporter of the Desert," is a familiar figure in every town and mining camp in Nevada, where she has spent each summer for the past 10 years making photographs and collecting material for feature articles which have appeared in a wide variety of publications. Another of her Black Rock Desert stories appeared in the April issue of *Desert Magazine* ("Lost Hardin Silver: Mystery or Hoax?").

* * *

Ed Ellinger, author of this month's "Sedona Is Our Home Town," was the logical writer to do the Sedona, Arizona, story. Eight years ago he selected Sedona as his home town because of its rare combination of desert and mountain beauties.

Operating his small handicraft and Indian trading post at Sedona, Ed is still completely satisfied with his adopted home.

"I have traveled much and have visited almost every nook and cranny in the world," he writes, "but never have I found a place with more to offer than the American Southwest in

general and Arizona in particular.

Ed was also the author of "Hoke Denetsosie: Navajo Artist" (*Desert*, July, 1952).

* * *

Fred Glimpse, author of the prize winning Life on the Desert article in this issue, is a transplanted New Yorker. He and his wife Jan moved West after spending a winter in the warm sunshine of Arizona and Mexico.

In Ithica, New York, Glimpse was production manager of the Rural Radio Network, but now, from his home in

Phoenix, Arizona, devotes his entire time to writing. He is currently working on a biography of good eating adventurer Duncan Hines, due to be published in September by Thomas Crowell.

Glimpse lists hunting and fishing as his hobbies, while his wife is an inveterate rockhound, maintaining a collection of rocks that takes up three sides of their living room. "That's why we moved to the desert," he explains. "Whatever we like to do we can do the year around."

Desert Pictures Are Valuable

Every month is a picture month on the desert—in summertime on the higher elevations, and during the winter season on the floor of the desert. In order to bring the best of the desert photographs, both amateur and professional, to readers of *Desert Magazine*, two cash prizes are offered monthly for the camera artist sending in the best prints.

There is a wide range of subjects—landscapes, wildlife, strange rock formations, sunsets, prospectors, Indians—there is no limitation as long as the pictures are taken on the desert, and all *Desert* readers are invited to participate.

Entries for the July contest must be sent to the *Desert Magazine* office, Palm Desert, California, postmarked not later than July 18. Winning prints will appear in the September issue. Pictures which arrive too late for one contest are held over for the next month. First prize is \$10; second prize, \$5. For non-winning pictures accepted for publication \$3 each will be paid.

HERE ARE THE RULES

- 1—Prints for monthly contests must be black and white, 5x7 or larger, printed on glossy paper.
- 2—Each photograph submitted should be fully labeled as to subject, time and place. Also technical data: camera, shutter speed, hour of day, etc.
- 3—PRINTS WILL BE RETURNED WHEN RETURN POSTAGE IS ENCLOSED.
- 4—All entries must be in the *Desert Magazine* office by the 20th of the contest month.
- 5—Contests are open to both amateur and professional photographers. *Desert Magazine* requires first publication rights only of prize winning pictures.
- 6—Time and place of photograph are immaterial, except that it must be from the desert Southwest.
- 7—Judges will be selected from *Desert's* editorial staff, and awards will be made immediately after the close of the contest each month.

Address All Entries to Photo Editor

The Desert Magazine

PALM DESERT, CALIFORNIA

ON DESERT TRAILS WITH A NATURALIST - XVI

It Builds Its Home of Wood

The neotoma is a noisy little creature of the wild. Commonly called a pack rat, it is an architectural genius—and prefers to work at night.

By EDMUND C. JAEGER, D.Sc.
Curator of Plants
Riverside Municipal Museum

PACK RATS in many ways are like human beings. The activity pattern of any one animal is much like that of the others.

But just as there are men of imagination who plan and perform new and almost unbelievable tasks, so there are pack rats that surprise us by doing things different from their fellows.

This past autumn several of my companions came in from a long walk in the Joshua Tree country and asked me if I'd ever heard of a trade rat that built a home on the "spiral staircase plan." I admitted I had not and went immediately to see the ingenious domicile.

The unusual home would never have been discovered if the thick corky Yucca bark had not fallen off and left exposed the strange staircase and its contents of sticks and stones.

The most unusual evidence of pack rat industry and persistence I have ever seen recently was shown to me by two boys who had gone on an old-fashioned knapsack hiking trip in the juniper-yucca forest on the Mojave Desert to the north of the San Gabriel Mountains.

In times past, men cutting wood there had left behind great quantities of juniper wood chips, and it appeared that this species of pack rat had collected these chips to use in building the usual protective heap of material above its underground home. Numerous small sticks left by the wood cutters also were carried in. The result was a conical pile of sticks and chips at least four feet high and six feet wide at the base, enough to fill a truck body. Some of the sticks were an inch in diameter and a foot and a half long. I estimated the largest of them must have weighed as much or more than the animal that carried them. What a prodigious amount of labor it cost and

how many trips were required to amass this giant hoard of materials I will not venture to estimate.

Persons who observe carefully and travel widely over our southwestern American deserts, may notice that beneath creosote bushes there is often a considerable amount of litter made up of cut, leafy creosote bush twigs; some are green, but others are old and very dry. Sometimes almost every creosote bush has been worked on.

An examination of the branches will reveal very neatly cut ends; in fact, the cuts almost appear to have been made by a single upward draw of a very sharp jack-knife. Closer inspection shows that it must be the neat work of rodents or animals of near relationship, for one can see the paired marks made by the incisors or front cutting teeth.

There is good evidence that much of this twig-trimming, especially in the open desert, is done in the early morning or evening by jack rabbits, but it is easy to see that many of the branches that have been cut off are beyond the reach of jack rabbits' teeth, even when the animals are standing on their hind legs.

These cut twig-ends high up and in the interior of the bushes I find to be the result of night work by pack rats. The creosote bushes trimmed by them are usually found near rocky areas where the *Neotoma* makes its home. Sometimes the animals carry the leafy trimmings to the entrance and even into the interior of the underground nests. Just why hares and pack rats trim the bushes is not known. I do not believe they eat any of the woody stuff. It is my conviction that the jack rabbits do it to help keep their front cutting-teeth sharp. But the trade rats do it to get material to help make up the debris piles which protect the entrance to their subterranean dens.

This pruning work is a very conspicuous and interesting phenomenon and will doubtless be noticed with much interest, now that attention has been called to it and an explanation given.

In the cottonwood thickets along the upper Mojave River the Mojave Brown-footed Wood Rat is largely a tree dweller. Some years ago before land-clearing operations began, their

huge stick nest shelters were so numerous that I sometimes could count 20 or 30 to the acre. Some, built about the base of bushes, were made of long sticks and twigs put together in steep stacks, while others were placed sometimes 15 feet up in the trees and consisted of huge, globular collections of cut twigs and leaves.

Occasionally, one could see the smoky-gray animals running about on the tree limbs all through the day, but it was at night that they really came out, and then they made so much noise while going about their business of cutting and dragging away twigs and dry sticks that I found it quite impossible to get any sleep while camping in their midst. The constant chittering of teeth set my nerves on edge.

In observing the animals that came out in the daytime, I noticed that almost all of the males had shortened tails, some cut off near the end, while others were mere stumps. The mutilations were doubtless incurred in fights with other quarrelsome males, or females displeased with their presence.

Pack Rats or Wood Rats, properly called *Neotomas*, are not confined to deserts, but have a wide range of distribution on the North American continent from Nicaragua north to Florida and Pennsylvania and west to the Pacific Coast as far north as southwestern Yukon, with only a minor gap in the upper Mississippi Valley.

The first pack rats recorded by scientists were ones John Batram of Philadelphia found living in the rocks of the Blue Mountains of Pennsylvania. They were all of the round-tailed species. Peter Kalm, who described them in 1749 in his book of *Travels* tells how they came out only at night and made "a terrible noise."

In those days this curious-minded and industrious rodent was thought to be much like the common rats of the Old World, but later examination of its teeth showed it to be only distantly related and it was then described under the euphonious name, *Neotoma*, a Greek-derived word meaning the "new cutter." It was indeed an apt name for this newly recognized animal, which spends so much of its time cutting leafy twigs and branches for the construction of its houses.

As more of these big-eared, bright-



Left. One of the desert species of pack, or wood rat. Photo by George M. Bradt. Right. Pack rat architecture is sometimes ingenious, as shown by this home built on the spiral staircase plan in the stump of an old Joshua Tree.

eyed, soft-furred rodents were discovered, the country over, it was clearly evident that they should be divided into two groups: one comprising the forest and high mountain dwelling species of western North America, with flat, bushy, almost squirrel-like tails, and the other with a round tail, only sparingly covered with hairs. Our desert pack rats all belong to the round-tailed group.

Up to the present, at least 137 species and subspecies of *Neotomas* have been described, each characterized by peculiar modifications which range all the way from variances in size and color to skull construction and habits.

The many species of desert dwelling pack rats differ considerably in the places they choose for home sites and the kinds of shelters they construct. The Colorado Valley Wood Rat is wholly confined to the narrow belt of willow, cottonwood and mesquite thickets just above the Colorado River's high water level. It is partial to mesquite covered lands. It seldom builds nests, but lives in unprotected subterranean burrows.

Just a few hundred yards away, where the desert proper meets the river bottom lands, dwells quite another kind of wood rat which is given to living in burrows protected by small or large accumulations of sticks, stones and cactus joints.

All of the *Neotomas* are creatures of the wild, and it is unfortunate that the name "rat" ever was applied to them, for they are only distantly related to the scavenger rat that often has made itself a scourge to man. Their proper name is neotoma—pronounced nee-aught-o-ma, accent on the second syllable.

Mexico Now Provides All Paved Route, Nogales to Mexico City

The condition of temporary bridges on Mexico's Highway 15 connecting Nogales, Arizona, with Mexico City along the Pacific Ocean were made known this month. The highway, known as *The Western Route to Old Mexico*, is 1511 miles long. It is entirely paved and "quite suitable for motor travel" the Pemex Travel Club reported.

The temporary bridges are in the area between Ciudad Obregon, which is 330 miles south of the United States border, and the Plaxtla River, on the coastal plain.

First Temporary Bridge at Yaqui River, 10 miles north of Ciudad Obregon. The bridge is narrow and constructed of wood, but in good condition.

Second Temporary Bridge is over the Mayo River, about five miles north of Navojoa. This river is crossed over the railroad bridge which is converted for motor traffic.

Third Temporary Bridge is at the Fuerte River, 11 miles north of Los Mochis. This river must be forded in the dry season, but during the wet months small barges are used to convey travelers across. The ferrying service is reliable and safe, Pemex reports, and is operated by authorized Mexican Government personnel.

Fourth Temporary Bridge is on the Sinaloa River (also known as the Guasave River) which runs through the village of Guasave, 37 miles south of

Los Mochis. This narrow bridge is of wood construction.

Fifth Temporary Bridge is located 32 miles south of Culiacan. Here is found another narrow, wood bridge across the San Lorenzo River.

Sixth Temporary Bridge is on the Plaxtla River, 55 miles south of the crossing above. A permanent bridge is expected to be finished across this river sometime this summer. In the meantime a narrow wooden bridge is provided.

The current rate of exchange is 12½ Mexican pesos for one American dollar and the Mexican government supervises the tourist facilities and services offered along the highway through its Tourist Bureau, 89 Juarez Ave., Mexico City.

Pemex also reports that the Mexican Highway Department maintains the *Western Route* in excellent travel condition and is rapidly replacing the temporary bridges with modern steel and concrete structures. The Pacific Coast route is developing at an unprecedented pace and may soon rival the Central and Eastern highways.

The former starts at El Paso and connects with Chihuahua. The Eastern route links Laredo, Texas, with Monterrey and Mexico City.

Food, service stations, garages and parts for all conventional makes of automobiles are available today on the West Coast span.

Explorer's Cross

By GLADYS L. SAVAGE
Denver, Colorado

This is the end of the trail,
Here on this barren hill,
Empty of wolf tracks and feathers,
Silent except for the wail
Of lonely wind.

Here a Christian turned
Years and years ago,
Leaving a cross of stone
Where his camp fire burned
In the first autumn snow.

This is the land of cedars,
Twisted and gnarled with age,
Far from the land of singing pines
And from prairie sage.

This is the land of yesterday,
Unwanted and left alone,
Except for the crow and the wildcat
And for the cross of stone.

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CACTI

By MILDRED BREEDLOVE
Las Vegas, Nevada

A hundred kinds of cacti wear
An armor of protective spines,
And rash the wanderers who dare
Disturb their hard, unyielding lines.
They flaunt no bright, enchanting green,
Their beauty has succumbed to stress . . .
A summer or a winter scene
Reflects the same harsh ugliness.
They seem unchanged from year to year,
Not knowing dew or snow or rain,
So seldom does a cloud appear
Above this arid desert plain.

But sometimes storms get lost and spill
Their waters on the desert sand,
Then thirsting cacti drink their fill,
And, gratefully, their buds expand
To challenge, with their brilliant shades,
The blossoms of more favored plants,
As cacti spines and yucca blades
Give way to beauty's late advance.
And they who view this wilderness
With disbelieving eyes may see
These miracles of loveliness
Become a desert symphony.

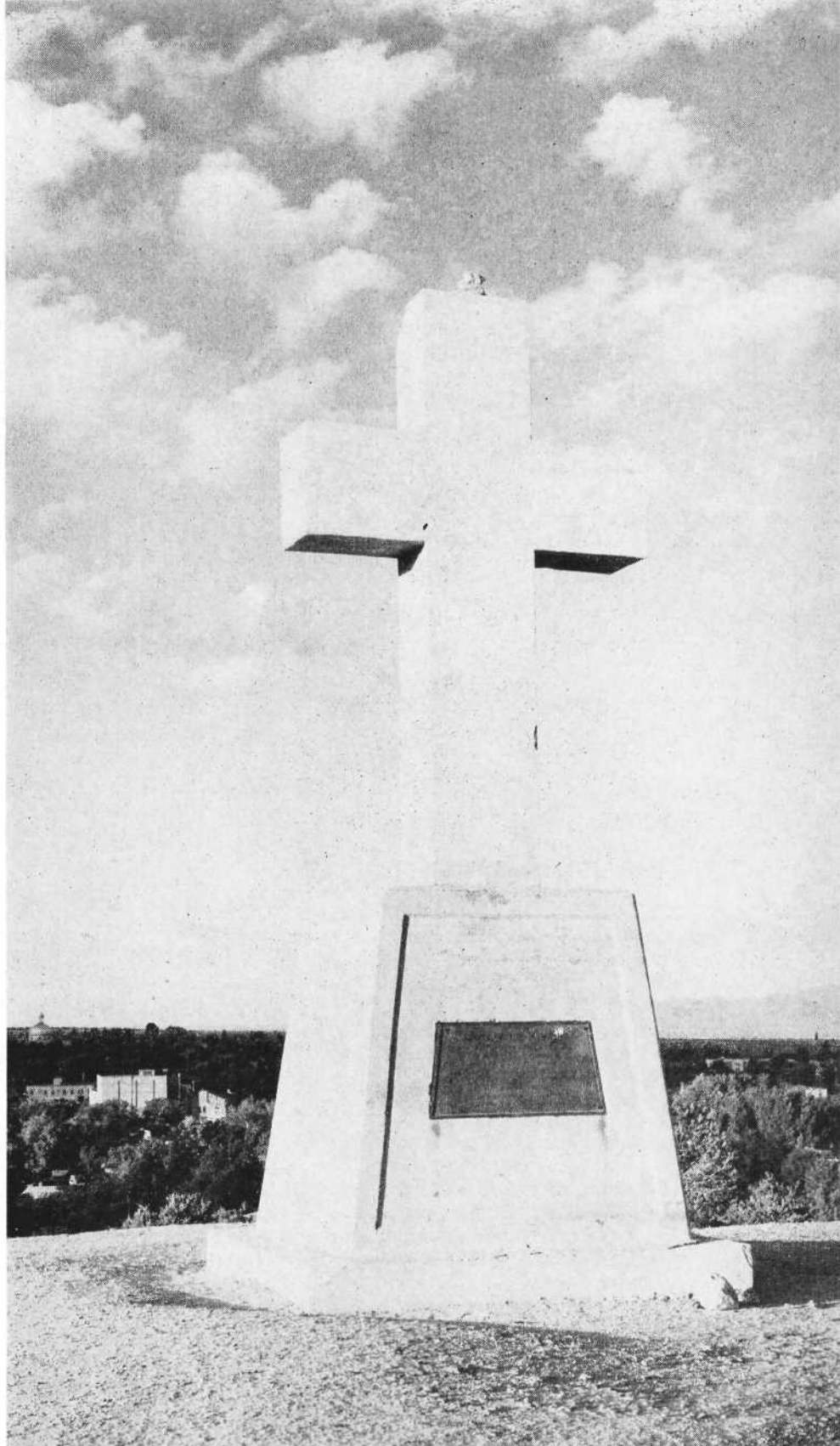
God is Love

By TANYA SOUTH

Had I the will, I'd find a way.
Had I the wisdom, I would pray.
Had I a tortuous Path to climb
And needed guidance, strength and
time,
I'd ask the heavenly Powers to be
With me, eternally.

I'd ask for help, and know it would
Arrive to do me greatest good.
I'd lean completely on His Power
Each livelong hour.

With peace at heart I'd humbly
strive
To let God take the reins, and
drive,
And know help comes from up
Above,
For God is Love.



Cross of the Martyrs. Santa Fe, New Mexico. Photo by Wyatt Davis, courtesy New Mexico State Tourist Bureau.

DESERT ROSES

By DOROTHY W. ALLEN
Napa, California

Within the heart of ever living rock
A welling flux has gently overspread,
To glaze, reglaze, till banks of stony bloom
Slowly arise, continually fed.

And all is overstrewn with prickly dew
Of quartz, a mist that never dries away,

A frost, in humid heat to ever cool
The curling stone, the rich chalcedony!

The roses cling to narrow iron walls,
Abysmal time, for many thousand years;
Yet never heavy petal here dissolves,
Nor jeweled fruit the lonely blooming bears.

But when the ancient sea has dried and gone,
And aging, rusted all the mountain down
These roses lie transfigured in the sun
Bestrewn and shattered with the wandering
stone.

LETTERS

Verboten . . .

Ontario, California

Desert:

Driving north from Yuma on Arizona State Highway 95, a motorist is really in America and not Prussia. The signs along the highway are in English, but the spirit and intent of the signs are as Prussian as any in the days of the old Kaiser. They forbid, and thereby deny the right of the American citizen to travel over and enjoy one of the most beautiful and interesting desert regions in the country. . . .

By warnings and threat of dire punishment (fines or imprisonment or both) mere citizens are forbidden to do the things they usually go to the desert to do. The "verboten" signs start almost before one gets out of Yuma and continue for about 30 miles along the highway. One must not leave the road to snap a picture of an interesting cactus growth or see a flower at close range, or hunt for a semi-precious stone, or make camp for lunch or the night. You are on a military reservation and you are constantly reminded of it, and if you don't believe in signs just keep a sharp lookout for a military patrol car, which will be along soon. . . .

Just why this part of Yuma County should have been taken over for testing various military equipment and actions is not clear. A few miles to the east are large plains or valleys where there is no civilian travel. There, the military could test and shoot and tinker, with no necessity for posting warning signs of danger to the traveler.

Many of the old desert rats and prospectors don't pay much attention to the signs. Some of them maybe can't read anyway. But they, along with about 90 percent of other desert travelers, would like to tell the Army brass responsible for the signs to go—someplace other than Highway 95.

SAM RILEY

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Jesse Craik Passes . . .

Needles, California

Desert:

With the following information we write "thirty" on the life of a true friend and lover of the desert.

Jesse Craik, affectionately known as "Mayor of the Turtle Mountains" to the many desert lovers who have chatted with him at Lost Arch Inn, passed away on March 26, 1955, in General Hospital in Los Angeles.

Jesse had lived in the Turtles of



Reader Riley enclosed the above pictures with his letter to verify the fact that the Army has definitely moved into the Highway 95 area.

California for 22 years and his hearty welcome and keen sense of humor will be missed by hundreds. His body was cremated on March 28 and it is the plan of his brother, Frank, who spent much time with him in the desert, to return his ashes to the Turtle Mountains. A graduate of the University of Kansas, Jesse had led a full and interesting life and had been associated in many activities including merchandising and mining. When asked by a friend what he considered the most happy time of his life he answered without hesitation, "the years I have spent in the Turtle Mountains." With the return of his ashes to the Turtles he will be forever in the desert he most enjoyed.

The Turtle Mountains will always be a haven for those who enjoy nature and the desert but an emptiness will be there for those of us who have in the past been greeted by Jesse's cheery "hello, come on in."

CELIA E. BECKER

Needles Gem and Mineral Club

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Cactus Named . . .

Los Angeles, California

Desert:

On your May, 1955, cover there is a beautiful cactus and I'm sure a lot of readers like myself would want to know the name of it. The tortoise we recognize, but not the cactus.

HARRY EARLE

Cactus on the May cover is one of the Hedgehog species, known formally as Echinocereus mohavensis and sometimes called Mojave Mound Cactus. Its blossom is one of the prettiest flowers on the desert.

—R.H.

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More on Vandalism . . .

Las Vegas, Nevada

Desert:

I have been operating mines on the desert for more than 40 years and will say about vandals that the past few years have been the worst.

I do not know how to eliminate them, but a neighbor of mine suffering from the same damage of broken locks and stolen property gave me the following advice: close the doors and windows with padlocks, then tie the doors both top and bottom with wires extending out of electric caps. Nine out of ten times they explode by pulling them apart.

Most trespassers know how to read warning signs. This may help Robert M. Reid (*Desert*, letters, May, 1955) to cut down the number of vandals.

CHARLES H. LABBE

Plants and the Law . . .

Tucson, Arizona

Desert:

I am disturbed by reading one of the letters under "Home on the Desert" in the May issue.

Our deserts are fast becoming denuded of native plants—especially the lovely Desert Holly and the Desert Lily. I was under the impression that both of these plants were protected by law.

I wonder if it is a good idea to encourage this practice? Should not *Desert Magazine* lean more to conservation of our native heritage, and ask its readers to leave the bulbs and plants in their native habitat to live and multiply for all to enjoy?

MRS. E. D. MORTON

Desert was at fault in not making clear that all of Mrs. Pace's transplantings were from land being leveled and plowed for cultivation. Thousands of acres near Mecca are now being brought under cultivation from the All-American Canal. Laws protect the plants on public domain, but not on private land.—R.H.

180-degree Error . . .

San Diego, California

Desert:

Under "Here and There on the Desert" (*Desert*, May, 1955), regarding the Julian Flower Show, I suggest that the ladies of Julian change their old-fashioned costumes to bathing suits—if Julian is "60 miles west of San Diego," as your magazine states. That will put the ladies right in the Pacific Ocean.

ROY L. MORRISON

Thanks, Roy, you are right as usual. Desert's news editor merely fumbled his geography.—R.H.

Hite Ferry Open . . .

Via Cortez, Colorado

Desert:

In order to clear up the confusion that has arisen from an article which appeared in the "Here and There" section of *Desert Magazine* for April, 1955, I would like to state that I am the owner of the Hite Ferry referred to on page 36. It is definitely still in operation.

The Hite Ferry, more properly known as the Chaffin Ferry, has been operated on a lease basis for some time. The Johnsons, who were operating it most recently, were forced to leave for the reasons given in your article, but that does not mean that the ferry has quit. It is still running under my direction and I would appreciate it if you would print this information.

A. L. CHAFFIN

Thanks to Nell . . .

Duckwater, Nevada

Desert:

I have been wanting to write to tell you how we love to get articles by Nell Murbarger. Her trip to Mexico was wonderful. Reading along, I commenced to look for a good place to camp with her. I think she is a very brave girl to go the places she does—and she must have a lot of faith in the Mercury!

Such stories of out-of-the-way places like that should be published more often and we should be thankful we have a magazine like the *Desert Magazine* to publish them. After reading

Nell's last article, and it was too cold to go out and plow, the wife and I got out our back numbers of *Desert* and read them over again. You see, we have them all from the first.

You may be surprised to know that the field men of the oil companies are so interested in them. We always show them *Desert Magazine* when they stop here. They often miss the really beautiful minerals found in igneous rocks because they work in the limestones.

I think Nevada should give Nell Murbarger a big hand. She knows our state better than any of us and is certainly teaching us about Nevada history.

B. F. ROBERTS

Hard Rock Shorty of Death Valley



Hard Rock Shorty was in a talkative mood. He had just received a check for a car of high-grade ore. It had taken many months for him and Pisgah Bill to sort over the rock and pack it down to Barstow on burros—but the check was enough to grub-stake them for another three years—so he had not a worry in the world.

The dudes loitering on the lean-to porch at the Inferno store were listening and asking questions. Eventually the subject got around to snakes, and Hard Rock was telling them about Pisgah's pet rattler.

"Bill had a lotta trouble figgerin' out what to feed that buzz-tail," Shorty was saying. "The pesky reptile wouldn't eat beans, an' it turned up its nose at Bill's sourdough biscuits.

"Most of the time the reptile'd lie curled up in a corner, but when eatin' time came it always crawled over by Bill's chair an' would buzz its tail to let Bill know it was hungry.

"It liked eggs better'n anything except mice, and since Bill had a pen o' chickens under the mesquite tree he got t' feedin' it eggs three times a day. Then that snake got to prowlin' around and found a hole into the chicken yard.

"Bill didn't know about it at first, but he kept grumblin' about the hens'd quit layin'. Sent to the

mail order house to get some o' that fancy chicken feed that was supposed to make 'em lay more eggs. But it didn't do no good.

"Then one evenin' when Bill went out to look in the nests fer eggs he found ol' buzz-tail there jest gettin' ready to swallow the last one.

" 'Why you blankety-black ol' thief,' Bill says to him. 'I'm gonna break you o' that habit.'

"So Bill sent another order to the mail-order house. This time it wuz fer some o' them china nest eggs. When they came, Bill put two or three of them in each nest.

"That evenin' the snake didn't come into the cabin as usual, and when Bill went out to the chicken yard there was that rattler with a big hump in the middle o' him tryin' to get outa the yard. The hole wasn't big enough fer that hump, and there he was, wedged in, with half of him inside and half outside. He looked up at Bill sorta guilty like an' Bill pulled him out and brought 'im in the cabin.

"That snake wuz curled up on the floor three days tryin' to digest that egg—an gettin' hungrier all the time. After a few days Pisgah decided the buzz-tail had been punished enough and extracted the egg. But do yu know, that rattler'd never look at an egg after that."

Be There!

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Here and There on the Desert...

ARIZONA

Record Bull Snake . . .

WICKENBURG—Dr. Floyd Bral-liar, of Wickenburg, has found what is believed to be the largest bull snake on record on his Sombrero Ranch. The snake measured seven feet, two inches. Previous world's record bull snake was six feet, ten inches in length. The snake is now on display in the San Diego Zoo, San Diego, California. *Wickenburg Sun*

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Indians' Plea Studied . . .

WASHINGTON, D. C. — Indian Commissioner Glenn Emmons has taken under advisement the request of the Colorado River Indian Tribal Council to stop relocating other Indians on their reservation around Parker, Arizona. For 80 years it had been understood that Mojaves, Chemhevis and other Indians in the Parker area would use the reservation, the Indians argued. But in 1945 the Interior Department ruled that the land should be used by all Indians in the Colorado Basin and proposed an ordinance that was passed by the Tribal Council. About 500 Navajos, Hopis and Hualapais were moved in. A 1951 tribal referendum rejected the 1945 action. Interior officials claim the ordinance can't be rescinded, but the Indians hope to find a way. *Phoenix Gazette*

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Museum Plans Approved . . .

SAFFORD—Plans for a combination historic museum, tourist information bureau, tourist roadside park and chamber of commerce have been presented to the Safford-Graham County Chamber of Commerce. The Board, after accepting the plans, began studying various means of financing the development. *Graham County Guardian*

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Counties Get Aid . . .

WASHINGTON, D. C. — Eight Arizona counties have been designated as drought disaster areas in which ranchers will be eligible for emergency government aid, Secretary of Agriculture Ezra Taft Benson announced. Mohave, Navajo, Yavapai, Graham, Coconino, Gila, Apache and Greenlee counties were the designated areas, the first in the nation to be so named this year. Under the Federal program, the government grants \$1 per 100 pounds discount on feed grains from government stocks and pays part of the transportation costs of bringing hay into the drouth-stricken areas. *Phoenix Gazette*

Help Promised Papagos . . .

WASHINGTON — Eight thousand Papago Indians, whose lands lie above and below the Mexican border in Arizona, will have help in their problems of citizenship, borders and alien registration, according to Sen. Barry Goldwater (R-Arizona). The Indians have trekked back and forth for centuries, but have been trapped in recent wet-back crackdowns. *Yuma Sun*

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Charleston Dam Proposed . . .

TOMBSTONE—A bill calling for construction of Charleston Dam was introduced in Congress late in March by Congressman Stewart L. Udall. The proposed legislation also calls for construction of Buttes Dam on the Gila River near Florence and for activation of the Safford Valley Improvement Project. Charleston Dam would provide irrigation, flood and silt control and municipal water for Tucson and vicinity. *Tombstone Epitaph*

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Brahman Steers Escape . . .

PHOENIX — Downtown Phoenix was in terror late in March as a herd of Brahman steers rampaged through city streets, injuring four persons after breaking out of the stockyards. When motorists started blowing their auto horns, the steers ran amuck. With red lights blazing, Phoenix police and cowboys rounded up the herd, but declared that police cars will never replace a good cow pony. *Phoenix Gazette*

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Gila Monster Law Cited . . .

PHOENIX — Arizona is one state where a poisonous creature is protected by law. Both gila monsters (poisonous) and horned toads (harmless) are protected species, according to the Arizona Game and Fish Commission. Order P-6 requires that "neither of the species may be sold, given, offered for sale or exchanged except by written permission of the commission." Big business had threatened to make the reptiles extinct, gathering and shipping them out of the state. *Arizonian*

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Allan Harper Passes . . .

FORT DEFIANCE — Allan G. Harper, long-time Indian Service official and friend of the Navajos, passed away April 29 at Espanola. He was a member of the staff of U. S. Indian Commissioner Glenn Emmons in Washington. From 1949 until 1954 Harper was area director at Window Rock, Arizona.

CALIFORNIA

River Swim Completed . . .

LOS ANGELES — Two Stanford graduates climbed out of the silt-filled Colorado River at Pierce Ferry, 180 miles up the river from Hoover Dam, and claimed they had vindicated their theory that man can swim in water that a boat can't navigate. Wearing rubber shirts, long underwear and trunks and propelling 80-pound rubber packs, John S. Daggett, 27, and William K. Beer, 26, both Los Angeles insurance salesmen, swam approximately 280 miles down the Upper Colorado River in 26 days. It was the first time the feat had been accomplished. *Los Angeles Times*

Road To Be Opened . . .

EL CENTRO — Imperial County supervisors still plan to open the Blythe-Niland road on July 1. Because the Blythe-Niland road runs through a portion of the U.S. Navy gunnery range, residents of Palo Verde and Imperial valleys have been warned not to use the road. But supervisors said they would reopen the road after noting that the government had not fulfilled an agreement to provide a replacement road after the Chocolate Mountain road was closed five years ago. A Navy League has urged that efforts be renewed to obtain a replacement road. *Palo Verde Valley Times*

Blue Cut Road Opposed . . .

PALM DESERT — The Bureau of Public Roads is to oppose construction of the Blue Cut road connecting Coachella Valley and Twentynine Palms, the Desert Protective Council has learned. The Desert Protective Council, a group of citizens formed to promote conservation and protection of the natural beauties of the desert, has also opposed the road. The BPR opposition is based on two factors: expensive original construction, difficult and above normal maintenance with little advantage to through traffic and no advantage to Joshua Tree National Monument traffic. *River-side Enterprise*

Burro Derby Announced . . .

APPLE VALLEY — August 4, 5 and 6 are the dates set for the Second Annual Burro Derby from Apple Valley to Big Bear Lake, according to the Old Miners' Association of Big Bear, sponsors of the event. The Derby will start at the old Sheriff's office on Highway 18 at Apple Valley and end at Big Bear. One hundred burros are ready to be led by contestants in this year's Derby. *Apple Valley News*

THE DESERT TRADING POST

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VIEW LOTS—Palm Desert Heights. Just above Desert Magazine block. Near Shadow Mountain Club, school, church, markets, bus. 70x100, \$1200 up. Paved, gas, elec., water. Restricted. For brochure write Box 65, Palm Desert, California.

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MISCELLANEOUS

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Sea at Highest Level . . .

COACHELLA—The Salton Sea is at its highest level in more than 40 years — or since the period when it dropped rapidly after being formed 50 years ago when the Colorado River burst into the Salton Sink. Surface of the sea is now higher than 234.96 feet below sea level, having risen nearly eight inches in the past year. Experts think it could rise as much as 15 feet higher before reaching a stabilization stage. Rise is caused by drainage waters from the Coachella and Imperial irrigation systems. *Los Angeles Times*

Alligator Shot in River . . .

BLYTHE—A 200-pound alligator was killed on the Colorado River near Blythe early in May. The swimming member of the lizard family measured 6 feet, 7½ inches in length. Reports of alligators in the Palo Verde Lagoon had been circulated for years, but this is the first instance one has been known to have been shot or captured, State Game Warden Jim Reynolds of Brawley said. Meanwhile, a Yuma woman said she believes the 'gator was one she had owned when it was a baby, but had later been released. *Palo Verde Valley Times*

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THE *Desert* MAGAZINE
PALM DESERT, CALIFORNIA

Tramway To Go Ahead . . .

PALM SPRINGS — The Mt. San Jacinto Winter Park Authority announced recently that it would go ahead with sale of bonds to construct the Mt. San Jacinto Tramway, although results of an economic survey had not yet been revealed. Authority officials said a preliminary report of the survey looked quite favorable. The aerial tram would cost about \$12 million. It is planned to carry passengers from the 2700-foot level in Chino Canyon to Long Valley at the 8515-foot level, about 2000 feet below the summit of Mt. San Jacinto. *Coachella Valley Sun*

NEVADA

May Abandon Bottle House . . .

TONOPAH—The historic Tonopah bottle house may soon be abandoned if funds cannot be raised to repair the roof, according to Florence Butler, president of the Board of Directors of the Nye and Esmeralda Historical Society. Funds in the past have been furnished by the Business and Professional Women's Club, but the latest demand is greater than funds available. Contributions can be sent to the Nye and Esmeralda Historical Society, c/o Mrs. Florence Butler, Tonopah, Nevada. *Tonopah Times-Bonanza*

Ichthyosaur Marks Park . . .

BERLIN—A lifelike replica of an ichthyosaur will mark the site of the discovery of the largest such prehistoric mammal ever found. The site, in Nye County near Berlin, has been set aside by the Nevada Legislature as a state park. The skeleton found near Berlin was 50 feet in length, with ribs nine feet long. Previous ichthyosaurs found in England and Germany were only 20 or 30 feet long. The monsters roamed the region before the Sierra Nevada Mountains and the Shoshone Range were pushed up to cause the ocean to recede. *Tonopah Times-Bonanza*



Gaming Tax Nears Million . . .

CARSON CITY — Gambling tax collections in Nevada for the second quarter of 1955 neared the \$1,000,000 mark, the State Tax Commission reported. Gambling operators, paying taxes for the months of April, May and June, contributed \$979,199, about twice as much as the figure for any previous quarter. A new tax scale, approved by the 1955 Legislature, in some cases triples the old tax. *Nevada State Journal*

Bill Proposes Land Return . . .

WASHINGTON, D. C. — Legislation before Congress would transfer government-owned Boulder City from Federal control to municipality status and permit greater use of Federal reclamation reservoir areas for public recreation purposes. The legislation, introduced by Sen. Alan Bible, of Nevada, is aimed at development of southern Nevada's Lake Mead area. The bill also allows the government to dispose of lands adjacent to reservoir areas to state and local governments. *Pioche Record*

Weather Unaffected by Atom . . .

WASHINGTON, D. C. — Recent atomic tests in Nevada have had no effect on weather in neighboring states, according to Sen. Anderson, chairman of the Joint Congressional Committee on Atomic Energy. Weather Bureau officials testified before the committee that even the tremendous energy released by an atomic explosion is so insignificant compared to the forces of nature that it could have no noticeable effect on the weather outside a few miles from the test site. Fear had been expressed that explosions were responsible for the drought in the Southwest. *New Mexican*

Litterbug Fined . . .

RENO—Justice of the Peace William R. Beemer recently fined Fred Rezzornico, of Reno, 50 cents after he pleaded guilty to "depositing rubbish within 1000 feet of the center line of a highway." Rezzornico had tossed a paper bag and wrappers from a hamburger sandwich out the window of his car. Justice Beemer noted that many such incidents could "cause the community to be littered." *Humboldt Star*

Las Vegas, Nevada . . .

Between 1500 and 2000 metal and industrial mineral mining men will meet in Las Vegas, Nevada, October 10 to 13 to outline their views on national mineral policies and to discuss the latest advances in mine and mill operating practices. The national meeting will be conducted by the American Mining Congress. *Pioche Record*

NEW MEXICO

Winds Damage Huge Area . . .

SANTA FE—Winds have damaged one million acres of New Mexico land, an area larger than Rhode Island. Another million acres are considered likely to blow by authorities who have recently inspected the state soil conditions. Without rain, ranchers face the most critical drought of the last three years. A large percentage of ranches are heavily mortgaged. *Alamogordo Daily News*

Tribal Leaders Are College Men . . .

SANTO DOMINGO PUEBLO — July 7 will mark the 357th year since Onate marched up the Rio Grande Valley in 1598 and found a congress of the Pueblos in progress. Today the same council meets, but with college-trained leaders. John Rainer, chairman, holds a Master's Degree in education from USC. Council members Teofilo Tafoya, who has done graduate work at UNM, Joe Herrera, a high school teacher in Albuquerque, and Ulysses Paisano, graduate of Haskell Institute in business, all have college degrees. *New Mexican*

Cavern Elevators Readied . . .

CARLSBAD—Tourists were to be riding up and down in new elevators in the Carlsbad Caverns by mid-June, Taylor Hoskins, Carlsbad Caverns National Park Superintendent, announced. The new elevators can take out 1000 persons per hour. Also planned is a \$250,000 public use building to contain a large lobby, ticket booth, museum, first aid station and offices.

Pueblo Ruins Found . . .

WHITE SANDS PROVING GROUND—Ruins of a small Indian pueblo which may date back 1000 years have been found at this rocket testing ground. Portions of four skeletons and numerous pieces of pottery and knives were discovered in the ruins, a base spokesman said. Discovery was made by engineers clearing the edge of a runway at Condon Field. The pueblo consists of about seven rooms with a patio, belonging possibly to one of the Tularosa people of the Pueblo III era. Bones and artifacts were found about two feet below the surface. *New Mexican*

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AEC Settles Controversy . . .

LOS ALAMOS—Gates will remain closed at Los Alamos, thus continuing to make it the only closed city in the United States. The Atomic Energy Commission announced the decision following long debate as to whether or not Los Alamos should maintain its gates, even though other nuclear research centers at Oak Ridge, Tennessee, and Hanford, Washington, have long since pulled down their fences. The AEC said security, economy and community relations required leaving the fence around Los Alamos. *New Mexican*

UTAH

Bryce Park Autonomous . . .

BRYCE CANYON NATIONAL PARK—Bryce Canyon National Park will be an independently-run national park, the National Parks Service has announced. In the past it has been governed by a supervisor established at Zion National Park. The two parks will no longer be connected administratively. In the separation action the National Park Service will also make a re-study of Zion National Monument to develop new roads, campsites, scenic spots, etc. *Garfield County News*

Reef Prospecting Ends . . .

CAPITOL REEF NATIONAL MONUMENT—Issuance of uranium prospecting permits within the Capitol Reef National Monument in south central Utah was to be ended on May 17, 1955, the Grand Junction office of the Atomic Energy Commission announced. Existing permits will be valid until they expire, the AEC said. The Commission opened the area to prospecting three years ago, with the hope that uranium deposits would be uncovered. With the exception of one small deposit, known prior to the inception of the exploration program, no commercial uranium deposit has been discovered. *San Juan Record*



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Utes Hold Meeting . . .

FT. DUCHESNE — Resolution to discontinue Ute housing projects was a highlight of a recent meeting of the Ute Indian tribe General Council. Housing Projects were to be discontinued as of mid-May. Failure of the Indians to understand terms of the loans and mortgages which they have signed was also discussed. *Salt Lake Tribune*

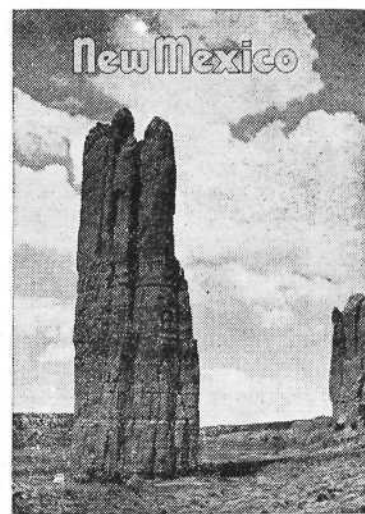
Cloud Seeding Valuable . . .

Four years of continuous cloud seeding over southern Utah has proved the benefits of such operations, according to Meteorologist Quate, of the Water Resources Development Corporation of Denver, Colorado. Studies show that during the past four years the moisture over the area under seeding has exceeded surrounding areas and was greater than average. Southern Utah was one of the first areas in the country to undertake cloud seeding to increase its rainfall. Since that time Nevada and South Dakota have passed legislation similar to the Utah laws. *San Juan Record*

Zion Plans Improvements . . .

ZION NATIONAL PARK—Among improvements scheduled at the Zion National Park are a new boundary fence, utility buildings, employee residences and further enlargement of the south entrance campgrounds, according to Conrad L. Wirth, Director of the National Park Service. Plans also include widening and resurfacing the south entrance road and construction of a new bridge at Oak Creek. *Iron County Record*

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MINES and MINING

Quincy, California . . .

Indiscriminate filing of mining claims in the Plumas National Forest is confusing the economic picture in regard to forest products to the detriment of the legitimate lumberman and the bona-fide miner, according to Dwyer Skemp, of Sloat, president of the Plumas chapter of the Western Mining Council. The Council has voted in favor of federal legislation which would allow government agencies to manage surface resources of mining claims. Some mining claims, Sloat said, especially uranium claims, block the sale of and access to timber land. *Nevada State Journal*

Battle Mountain, Nevada . . .

Local properties of the Copper Canyon Mining Co. have passed into operating control of the Battle Mountain Copper Company, a newly-formed Utah corporation composed of Utah and Texas people. Plans of the new operators center about immediate start of work in revamping and enlarging the present mill at Copper Canyon to treat 500 tons of open-pit copper ore per day and installation of an oxide leaching plant. Copper Canyon and Copper Basin ore bodies will be mined. *Pioche Record*

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Washington, D. C. . . .

The House has passed and sent to the Senate a bill designed to prevent people from using the federal mining laws as a vehicle to acquire public land for filling stations, restaurants, summer camps and other non-mining purposes. The bill provides that deposits of sand, stone and certain other materials must be disposed of under laws other than the federal mining laws. People have been using these materials as an excuse for claiming land under the mining laws, it is claimed. *Mining Record*

Boulder City, Nevada . . .

The Bureau of Mines experiment station in Boulder City is to be the site of a 12-month research and development program seeking an improved process for production of titanium sponge metal under a cooperative agreement between the federal government and Wah Chang Corporation. Wah Chang, said to be the world leader in the tungsten industry, will bear the major part of the project expense and will work with Bureau engineers and metallurgists. *Nevada State Journal*

Phoenix, Arizona . . .

Development drilling will be acceptable as discovery work for mining claims on Arizona state lands, under provisions of an act passed by the 22nd State Legislature recently. With the emergency clause, the bill became effective immediately, as of March 18, 1955. *Mining Record*

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Phoenix, Arizona . . .

The Arizona State Mine Inspector's office has issued a warning to vacationists and others to keep away from old mine shafts and tunnels that they may encounter on their travels. Ed Massey, State Mine Inspector, said the danger of falling rock is present in most of the old workings and even the vibration set up by the sound of a human voice may cause a slide and disaster. Abandoned explosives also present a hazard, as do poisonous snakes and insects, he said. *Northern Yavapai Record*

Washington, D. C. . . .

First hurdle in the path of a bill that would halt unrestricted mineral entry on the 2.6 million acre Papago Indian Reservation in southern Arizona has been cleared with approval by a House Interior Subcommittee. Senators Barry Goldwater and Stewart Udall have sponsored the bill. Sen. Goldwater has a similar bill in the Senate which would give all other Arizona Indian tribes the power to grant up to 25-year leases, a privilege currently enjoyed only by the Navajos. *Phoenix Gazette*

Battle Mountain, Nevada . . .

Construction of a 100-ton-per-day mercury kiln at the McCoy mine near Battle Mountain has started, under direction of the United Uranium and Oil Corp. of Denver. A gravel road has been completed to the mine property, located in Lander County two miles from the Churchill County line. Neal and Company, of San Francisco, were to install the kiln at a cost of \$100,000. Plans call for doubling its capacity by December. *Battle Mountain Scout*

Battle Mountain, Nevada . . .

Construction of a 175-ton-per-day barite mill was to begin immediately, the Magnet Cover Barium Corp., of Houston, Texas, has announced. An all-steel, 60 x 140-foot mill building and separate office building are planned on 23 acres of land adjoining the town of Battle Mountain on the west. Ore will be brought in from the Graystone Mine and from other properties now held by Magnet Cove. *Nevada State Journal*

Washington, D. C. . . .

A ten-year extension to 1968 of the Domestic Mines Program Act passed in 1953 under sponsorship of Senator George Malone has been approved by the Senate Interior and Insular Affairs committee. The Act provides for domestic purchase of tungsten, manganese and other strategic metals mined largely in the western states. It puts a floor on unit prices and amounts purchased of the minerals. *Reese River Reveille*

BOOM DAYS IN URANIUM

Uranium Miners Paid Over \$5,000,000 in U.S. Bonuses

In just four years of operation the government's uranium bonus program has paid out \$5,001,019 to miners for certified properties, according to Shelton P. Wimpfen, manager of the Grand Junction Operations Office of the U. S. Atomic Energy Commission.

The bonus program was initiated on March 1, 1951, under terms of Domestic Uranium Program Circular 6, to stimulate the production of domestic uranium-bearing ores.

As of April 7, 1955, a total of 2889 payments had been made at the rate of \$104,200 a month. Payments in more recent months have been stepping up to the rate of about \$195,000 a month.

Circular 6 establishes a bonus of double the base price for the first 10,000 pounds of contained U-308 produced from a new mining property when properly certified by the AEC. Bonus payments on production from a single certified property that produces 10,000 pounds of uranium ore may amount to between \$15,000 and \$35,000, depending upon the content of uranium oxide in the ore sold at a buying station.

Since the start of the program, 538 properties have been certified as eligible to receive the 2889 individual payments. Of these, 91 properties have received the full benefits.

The program for initial production bonus is administered by the Mining Division of the Grand Junction Operations Office. *Mining Record*

Army in Quandry Over U-Ore Find in Muggins

YUMA, Ariz. — Now that uranium has been discovered on the U. S. Army's Yuma Test Station, the questions are: Shall the small area involved be severed from the military base and opened to the miners? or, Shall mining be permitted on the land while it still remains a U. S. reservation?

Rich uranium ore from the Muggins Mountains just inside the southern line of the YTS has been assayed by the Atomic Energy Commission and found to run from \$36.60 to \$204.40 a ton. Although some 400 mining claims have been filed within the Test Station area, there is some question as to the legality of any claims filed after April, 1952, when the station was reactivated.

Joseph Baker, of Navajo Center near Yuma, spoke for the miners when he said, "The government needs uranium and we are ready to provide some of it quickly. The thing we want to know is: When can we get started on a safe and sensible basis so we will know our investments won't be taken away from us?" *Los Angeles Times*

Uranium Aerial Maps Available

The United States Atomic Energy commission recently made available its series of airborne anomaly location maps to all who wish to subscribe. Heretofore, the maps have been available at certain libraries only and have been posted in certain public locations.

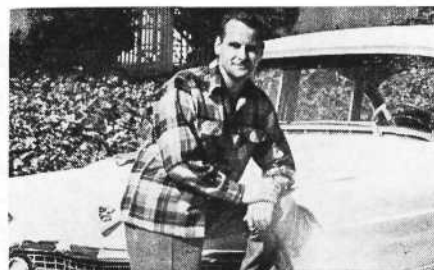
Now, however, the entire series may be purchased from the Federal government on a subscription basis; each new group of maps will be mailed on the 15th day of each month.

Airborne anomaly location maps present the results of reconnaissance flying of certain areas during tests for radioactivity. They delineate areas of unusually high radioactive count.

These maps are available from the Superintendent of Documents, Government Printing Office, Washington 25, D.C., at \$8.00 per year for the entire group of maps, regardless of the area flown. Maps will be sent airmail if an additional \$6.00 is included.

Each monthly group will contain a varying number of maps; subscribers will receive all maps, regardless of area. Groups dated October 15, 1954, or after will be sold separately if desired; the prices will vary according to the number of maps issued each month. Individual maps will not be sold separately.

For information regarding maps issued prior to October, 1954, apply to the Atomic Energy commission, Raw Materials Division, Attention W. Waylett, 1901 Constitution Ave., N. W., Washington 25, D. C.



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By Bill Harrigan

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Another man—until recently an apartment house janitor—showed me a \$35,000 check the Government gave him as a bonus for uranium he found while on a family picnic. Everywhere in the U.S., amateur prospectors are finding fortunes. It's happened to clerks, dentists, lawyers, machinists. It can happen to you.

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WHY I PUBLISHED THIS BOOK

When I first went out to find uranium, I got good advice as well as bad advice from pioneers in Colorado, from specialists in the Atomic Energy Commission, from geologists who had been looking unsuccessfully for months to find uranium, and from amateurs who stumbled on fortunes the first weekend. I tested every piece of uranium prospecting equipment I could find. I wasted a lot of time and money—but I found uranium! Then I asked myself: why should others make the same mistakes I made? Why not let them at least start where I leave off? So, I wrote the *Official Uranium Yearbook*. I may be prejudiced, but I think my *Uranium Yearbook* is the most practical, authoritative, easy-to-read book on uranium prospecting in print. But don't take my word for it—see for yourself.

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Plateau Uranium May Offer Coast Ore Key

SACRAMENTO, Calif.—There are now 100 distinct localities in which uranium deposits have been recognized in California, according to a recent issue of Mineral Information Service, published by the Division of Mines. The discoveries are so new, however, that there is little detailed geologic information about them.

Prospectors should study deposits in the Colorado Plateau for clues that might be applicable in California, the report recommends.

Uranium deposits are widely scattered between Imperial County on the south to Plumas County on the north, with Kern County credited for the largest number of known deposits and San Bernardino County second.

"Some of the most promising occurrences of uranium in California have been as vein deposits or shear zone deposits in igneous rocks," the Division of Mines said. "An outstanding example of a shear zone type includes those of the Kern Canyon district in which secondary minerals occur in sheared quartz diorite."

Purchase Station, Mill May Be Due for Nevada

Establishment of a uranium purchasing station and mill in Nevada may be among the developments of the near future as the result of explorations being conducted by Sen. George W. Malone and the Atomic Energy Commission. At present a detailed report on the prospects is being prepared for Sen. Malone by officials of the AEC. *Ely Record*

San Miguel County U-Claims at \$1 Million

FARMINGTON, N. M. — Uranium claims which their owner says are worth a million dollars are located in the Sabinosa area of San Miguel County, New Mexico.

Mrs. Jeannette V. Martin, of Farmington, a soft-spoken grandmother who started two years ago with a \$30 Geiger counter, is half of a team with 500 claims, covering 10,000 acres. The area, between Tucumcari and Las Vegas, is about 40 miles west of Las Vegas.

Mrs. Martin said that one offer of more than a million dollars has been received for the property, while other offers had not yet been investigated. Mrs. Martin and Col. Benjamin E. Thurston, of Camp Chaffee, Ark., are partners in the venture.

"At first I started going out with a \$30 Geiger counter to give my husband some outings," she explained. "Then one thing led to another and here we are with a major project in uranium." *Alamogordo Daily News*

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Yeringtonites Unite to Develop Uranium Claim

YERINGTON, Nev. — Businessmen of Yerington have formed the Yerington Uranium and Drilling Corporation for the purpose of developing the Hanson uranium ore discovery about 12 miles north of their town.

First action of the group will be to diamond drill the claims to determine the extent of the deposit, believed to be of commercial value. *Nevada State Journal*

• • •

Blythe, California, Ore Rich in Uranium

BLYTHE, Calif. — A Cleveland, Ohio, firm is exploring and developing uranium claims in the Blythe area, it has been revealed.

Ore from the claims, located about 15 miles east of Blythe, was reported to have assayed at two or three percent.

The claims are owned by John A. Rogers and P. N. Nelson and the development is being handled by the Auga-Line Mining Co., of Cleveland, a subsidiary of the Durro Construction Co., also of Cleveland.

Tom Durro, owner of the construction company, and Jack Caughland, an engineer for the firm, have studied the operation. *Mining Record*

Uranium Maps Are In Great Demand

WASHINGTON, D.C. — The uranium rush has government map makers working nights to keep its maps up to date. Any new map indicating areas where there may be radioactive mineral deposits become a best seller overnight, and the map makers are hard put to keep up with the demand.

On Feb. 11 for example, the U. S. Geological Survey announced publication of a map of the uranium, vanadium and copper deposits on the Colorado Plateau, the region which at present is the major source of uranium in the United States. Officials ordered 10,000 of the maps printed, figuring that would be plenty.

But in less than three weeks they had sold 7000 at 50 cents each and had to order another 15,000 printed.

The uranium-hunting fever runs highest in western states where most of the mineral has been found. But on Jan. 24, the survey announced four maps showing indications of "radioactive materials" in South Carolina, Georgia and Florida. Within two weeks the survey sold 2400 of these maps at 50 cents each. Robert L. Moravetz, an official of the map distributing service, said the survey runs out of maps once in a while for short periods of time, although generally it is able to keep up with demand.

"But the uranium boom crowds our office," he said "We have to push less urgent things aside for a time. There's a bigger demand for uranium maps than any gold rush ever experienced," he said.

There is no breakdown to show how many maps have been bought strictly for uranium prospecting. It is estimated that in the fiscal year ending June 30 nearly 3 million maps of all kinds will be distributed by the Geological Survey. This compares to 2,400,000 for the year end June 30, 1953.

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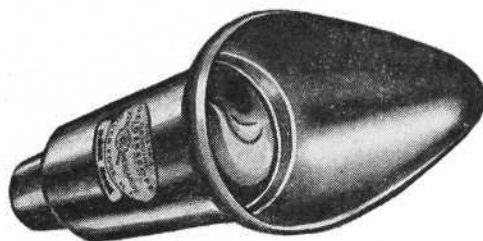
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California Businessmen Make Uranium Discovery

COACHELLA, Calif. — Two local businessmen have filed four uranium claims in the hills west of the city and have started mining operations.

George Taylor and Floyd Wright, partners in the United Auto Electric Co. on Highway 99, made their discovery in March while on a fishing trip. A Geiger counter they carried indicated radioactivity and the fishing was switched to prospecting. Ore samples were sent to the Eisenhower laboratories in Los Angeles, returning with an assay reading of .16 percent.

Three veins were subsequently uncovered and a stockpile of three tons of ore assembled for shipment to Moab, Utah. *Coachella Valley Sun*

Uranium Mine Merger Voted

SALT LAKE CITY — Tentative merger of Standard Uranium Company with Big Indian Uranium Company, both located in the rich heart of the Colorado Plateau, has been approved by Standard stockholders.

Both properties are located adjacent to Charley Steen's rich Mi-Vida Mine southeast of Moab, Utah. Steen said that Standard showed a net profit, after taxes, of \$112,000 during the first three months of 1955, while in April, when better weather permitted an average production of 400 tons of ore a day, profits were \$147,000.

The Big Indian claims have not yet been mined, but are said to be proven. *Nevada State Journal*

Uranium Strike Revives Famous Old Ghost Town

Uranium mining has breathed new life into the silver-mining ghost town of Marietta, Nevada, located in the Excelsior Mountain Range in Mineral County, about 25 miles from Mina. Marietta is the scene of what local residents call one of the richest uranium strikes yet made in the American West.

An Atomic Energy Commission report confirmed geologists' reports of the primary uranium ore uranophane, caused by hydrothermal action. Assays of samples are said to have run between six and eight percent, with the average shipping ore assaying at 6.7 percent. The property has been licensed and a fringe-area contract has been issued by the AEC at Grand Junction, Colo., to accept the ore at the Mina railroad.

The strike is in the Silver Bell property, lying on a fault eight miles long and from 200 to 800 feet wide. It was discovered by James D. Gish and Frank A. Notterman of Mina and Dr. Milo of Vallejo, California. Nevada Consolidated Uranium Co., headed by William J. Graham, Sam Potter and R. W. Duzen, has taken over the property.

Marietta was the scene of a gold and silver strike in 1905 that attracted worldwide attention. Ore from the Silver Bell rendered 600 to 800 ounces of silver to the ton. But the mine closed down in 1927 and until the recent uranium strike Marietta was sunk deeply in oblivion.

The present strike was made several months ago but news of it was withheld until last week. *Territorial Enterprise*

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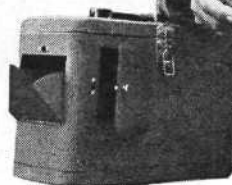
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California Uranium Find Results in Intense Search

INDEPENDENCE, Calif. — The Cactus Flat district southeast of Olancha has produced a uranium strike in which the ore assays from .2 per cent to .89 per cent, it has been reported.

Vincent Cuccia, president of Ontario Minerals Co., said a syndicate of 20 Ontario, Calif., businessmen financed aerial radiation surveys and ground prospecting which resulted in the strike.

After the strike more than 300 mining claims were recorded in the Inyo County Courthouse in Independence. Most of the claims are located in the Coso-Olancha section south of Lone Pine, while others are in the Eureka Valley and in Death Valley. *Mining Record*

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New Four Corners Map Lists All Uranium Sites

A five-color map locating all the better-known deposits of oil, gas and uranium in the Colorado Plateau has been released by University of New Mexico Publications.

John N. Durrie, Publications editor said that the large 26x32-inch sheet, prepared by Dr. Vincent C. Kelley, of the UNM geology department, is the first effort to compile so many geologic features of the Four Corners area into one map.

The map lists and locates 421 structures, including those for oil and gas and 71 better-known uranium deposits, in a four-state area taking in the northwestern quarter of New Mexico, northeastern quarter of Arizona, eastern half of Utah and the western half of Colorado.

The map, prepared by Kelley in cooperation with the AEC, is the result of this study. Eventually the map will be a part of a bulletin which will be published under the title, "Regional Tectonics of the Colorado Plateau and Relationship to the Origin and Distribution of Uranium."

For copies of the map address John N. Durrie, editor of UNM Publication, University of New Mexico. Price of the map is \$1.00. *San Juan Record*

Uranium Fever Strikes Buckeye

BUCKEYE, Ariz.—"Buckeye townspeople are quitting their jobs and taking to the hills. Prospectors are like ants out there. There's two or three on every hilltop."

So said Buckeye Justice of the Peace Billy Meck in explaining the uranium fever that has hit the tiny southern Arizona town since a strike was made south of town recently. Everybody that comes into town, he said, is carting an armload of radioactive rocks. *New Mexican*

Top U-Ore Region

SANTA FE, N.M. — New Mexico has probably the largest uranium fields on the North American continent, according to an article in the May issue of the *New Mexico Magazine*. One company alone has blocked out \$500 million worth of ore bodies.

Grants is destined to be another Moab, R. R. Spurrier, former State Geologist, author of the article, predicts—and Grants will undoubtedly surpass Moab. *New Mexican*

TRUE OR FALSE ANSWERS

Questions are on page 8

- 1—False. Death Valley was given its name by the Manly party.
- 2—False. Asbestos comes from mines.
- 3—False. Gold often occurs in quartz.
- 4—True. 5—True.
- 6—False. Rabid coyotes have been known to attack humans.
- 7—False. *Agua Caliente* is Spanish for hot water.
- 8—False. Salt Lake is approximately 4000 feet above sea level.
- 9—True.
- 10—False. Dead ironwood makes an excellent campfire.
- 11—True.
- 12—False. Uranium is found all over the United States.
- 13—True.
- 14—False. The Great White Throne is in Zion National Park.
- 15—True. 16—True. 17—True.
- 18—True.
- 19—False. The capital of New Mexico is Santa Fe.
- 20—True.

New Mexico Rush For Uranium

ALBUQUERQUE, N. M.—Southwestern New Mexico's uranium rush received added impetus recently when 36 new claims were filed in the Grant County Clerk's office.

William Soehle, Silver City merchant, and Richard Cureton, Hidalgo County rancher, filed on 30 claims in the Black Range mountains and six in the White Signal mining district, respectively.

Interest was heightened in uranium prospecting by announcement by the Duke d'Atri that he had filed on 9000 acres of potential uranium bearing grounds in Arizona. The Duke and Duchess d'Atri the past year have engaged in extensive development of uranium claims in the White Signal mining district. The ore went to a uranium mill at Grants, N. M. *Mining Record*



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FOR SALE: Beautiful purple petrified wood with uranium, pyrolusite, manganese. Nice sample \$1.00. Postage. Maggie Baker, Kingman, Arizona.

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The recent member demonstration and display of the Colorado Mineral Society produced some very unusual displays. Jim Litton showed illuminated transparencies, Harvey Markham offered a light-tight box with filter to use sunlight to test objects for fluorescence and a home-made dichroscope.

HOW TO GET THE BEST POLISH ON YOUR JADE

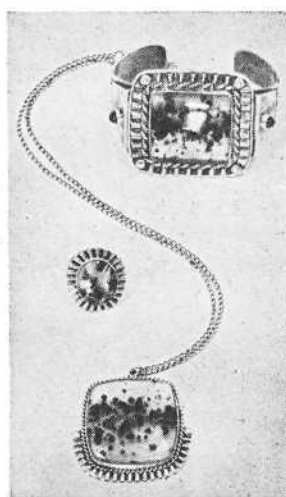
Before purchasing jade for polishing, check it for carbon spots. These small black inclusions in green jade will undercut and make it almost impossible to obtain a good polish. The black (dark green), gray and olive colored jades do not ordinarily have carbon spots and will all take a high polish. There is some green jade with black inclusions that will take a high polish; such as that obtained from parts of Alaska.

After selecting the desired shape and location on the blank, trim the jade on a trim saw. The first shaping should be done on a rough stone because jade works easily; more easily than agate. This initial shaping can be done by hand, but the stone should be placed on a dop-stick for the finishing steps. The final finishing should be done with sandpaper and a light buff.

In case you have no sanding discs, they are easily made by covering wooden discs with a single layer of inner tube for shaping rounded stones, and a rubber tile surface for flat stones. The rubber can be effectively cemented to the wood with rubber cement, which can also be used to cement the sandpaper to the rubber. Several disks should be made up for the needed gradations in sandpaper grit. No. 220 is used for rough grinding; intermediate steps call for 320 or 400; and 600 grit is needed for the next to final polish.

In order to keep the sandpaper clean, it is best to sand jade wet—damp, but not soggy. This damp sanding is best obtained by use of a spray instead of a drip water application. (A pliable plastic bottle with simple nozzle is excellent for intermittent spray application.) Needless to say, the best sandpaper to use is wet-dry auto-body sandpaper.

After sanding the jade to the best possible polish with the finest grade sandpaper available, a few quick passes over a chromium oxide leather buff will result in a highly polished piece of jade. If the jade undercuts, use only light sanding on the finest disk for the best polish with this type of stone. The main principle to remember is to work the jade as far as possible by sanding; then a leather buff will do the final job quickly. (Leon C. White, in the *Rear Trunk*, bulletin of the Nebraska Mineral and Gem Club)



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San Francisco Gem Show July Feature

Attention of the gem and mineral world will focus on San Francisco July 8, 9 and 10, for the International Gem and Mineral Exposition. Directors of the affair announced that the show will be the biggest and most fascinating ever presented in California.

Exhibits galore and opportunity to buy exquisite jewelry, to see rare, man-made emeralds, to wonder how the stone fish and turtles and sea horses swim lazily in a waterless tank and to meet friends and sit down for a snack of the best home-cooked food that was ever prepared outside of the home kitchen — that, in a nutshell, is what the exposition will feature.

The affair will take place at Civic Center. Women of the San Francisco Gem and Mineral Society will prepare and serve the food.

Another highlight of the show will be the famous Julius Gisler rare minerals collection including San Benito green garnets, amethyst crystals from Uruguay; twisted crystals, double terminated, of smoky quartz.

Slides or transparencies of rocks made by William Burton Pitts will also be viewed by exposition visitors.

LELANDE QUICK, who has been writing *Desert's* popular Lapidary page for 13 years has asked for a recess this month. He and Mrs. Quick have gone to Mexico for a well-earned vacation of several weeks.

First issue of the *Pearlblossom*, California, Gem and Mineral Society bulletin was issued in May by editor Mary Frances Berkholz. Among the many interesting items in the bulletin (as yet unnamed) is a feature on "Thumbnail Geology" by Mary Frances, in which she describes simply and clearly types of rocks and how they are formed.

The San Jacinto-Hemet, California, Rockhounds will hold their Eighth Annual Gem and Mineral Show in conjunction with the Riverside County Farmers Fair at the Fairgrounds, Hemet, California, August 17 to 21, it has been announced.

Dick Miller, of the El Paso, Texas, Mineral and Gem Society, visited the "Bone Yard" at the northern end of the Franklin Mountains near El Paso on October 4, 1939. While there he picked up a piece of sandstone and inscribed his name and the date on it. On March 29, 1955, he returned to the area, where millions of small sandstone chips were scattered, and picked up a piece to inscribe his name and date again. By amazing coincidence, the piece he picked up was the same one he had inscribed nearly 15½ years earlier, with name and date still legible. (From *The Voice*, bulletin of the El Paso Mineral and Gem Society.)

The President's Trophy and Board of Director's Trophy were to go to the two best exhibits at the June annual meeting of the Mineralogical Society of Southern California at Pasadena. Five classes of entries were to be judged, each based on length of membership in the group, plus a general class for all members.

Persons attending the International Gem and Mineral Exposition and California Federation of Mineralogical Societies convention in San Francisco Civic Auditorium July 8 to 10 may want hotel or motel reservations. These may be obtained by writing as soon as possible to: Miss Bertha Sanders, 2383 Union Street, San Francisco 23, California.

"The Wisconsin Dells were an oasis in a vast desert of ice when the mighty glaciers bypassed them. This driftless area is radically different from the rest of the state—wield and rugged." (Jean Dahlberg in the *Rock Rustler's News*, bulletin of the Minnesota Mineral Club.)

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Felker DI-MET Model DH-1—Operates like a circular saw, but blade dips into coolant stored in aluminum base. Blade can't run dry! Uses 6" or 8" DI-MET Rimlock or Metal Bonded Blades. Includes rip and angle fences.



Other machines available—Write for circulars on all DI-Met equipment!

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Torrance, California

Special Camera Takes Photo of Micromount Xls

Floyd R. Getsinger, of Phoenix, has built a camera that will take 35 mm. color pictures of micromounts that can be thrown upon the screen. So far as is known, this is the first time this has been successfully accomplished.

At a recent meeting of the Mineralogical Society of Arizona 150 of these beautiful miniature crystal slides were shown, photographed from the collection of Arthur L. Flagg.

Using a press camera as a foundation, Getsinger altered the back, the lens and the bellows. Focusing is done with mirrors, while a small 35 mm. camera affixed to the top holds the film. Two automobile spot lights are used for lighting and filters of various colors reflect upon each specimen to bring out its natural colors.

The average micromount is about one-quarter of an inch in diameter. On a six-foot screen, the reproduction in natural

colors is enlarged 350 diameters, or 120,000 times the natural size.

A tiny specimen of azurite and malachite in process of pseudomorphic transformation was easily studied, as was a specimen of murchisonite, latest mineral identified from Arizona. Rare microscopic quartz crystals terminated with vanadinite and fine hair-like crystals stand out in amazing perfection.

"Green is the hardest color to reproduce accurately," Getsinger explains. "To get the correct color of diopside, about 50 takes were necessary."

He plans to have duplicate slides in the near future for micromount hobbyists.

Getsinger, now in the insurance and real estate business, was for many years a professional photographer. His photos have won ribbons and medals in salons over the world. He was instrumental in organizing the Phoenix Camera Club in 1932 and was the first to furnish photographs for the Arizona Highways Magazine. He is currently president of the Mineralogical Society of Arizona.

"Now they are advertising synthetic turquoise. The price gives it away, for dealers are advertising it at a ridiculously low price—the price of genuine turquoise being what it is. The color is very intense on some which we have seen and there is a notable lack of matrix," according to George Merrill Roy, C.G., of the Shadow Mountain, California, Gem and Mineral Society. "Bear in mind, when buying turquoise, that southwestern turquoise is now very rare in good cutting quality and that the price is therefore high." (From the *Desert Hobbyist*, bulletin of the Shadow Mountain Gem and Mineral Society.)

"If the standard polishing techniques do not give you a good polish on turquoise, add the following step to your usual procedure. Charge a small piece of soft leather with polishing powder (chrome oxide is good) and allow it to dry thoroughly. Hold the leather in the palm of one hand and rotate the stone against it. This should give you an excellent polish in a matter of seconds." (Lee Hammons in the *Evansville, Indiana, Lapidary Society News Letter*.)

The Gem County, Idaho, Rock and Mineral Society was to hold its first annual rock and mineral show at Emmett, Idaho, June 24 and 25. Decision to hold the show was made by the members at the club's April meeting.

Members of the San Diego, California, Lapidary Society will participate in the San Diego County Fair at Del Mar, June 24 to July 4. Many classes of entries were listed for exhibitors in the fair premium book.

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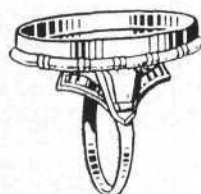
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Ladies' Rings in sizes: 5, 5½, 6, 6½, 7, 7½ and 8



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12x16 mm Cushion
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No. 80-5

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13 x 18 mm Oval
SS with GF Trim
\$3.15 each
3 for \$7.05



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12x16 mm Cushion
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\$2.50 each
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Men's Rings in sizes: 8, 8½, 9, 9½, 10, 10½, 11, 11½, 12, 12½ & 13

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FIELD GUIDE IS PRINTED FOR PART-TIME PROSPECTOR

The answer to the question of where to prospect is: Anywhere.

So says H. C. Dake, editor of *The Mineralogist Magazine*, in his new booklet *Popular Prospecting*.

Dake explains that no part of the world is wholly devoid of mineral wealth, but cautions that the prospector should have at least an elementary knowledge of mineralogy and geology. He lists several sources from which to obtain this knowledge; *Popular Prospecting* is also an interesting source from which to begin the search for prospecting knowledge.

The booklet first undertakes the subject: Where to Prospect, giving a general description of such occurrences as placer deposits and lode deposits and giving good examples of each. The next step is into a discussion of the gem minerals, what they are and where they are found. Metallic minerals are adequately described in *Popular Prospecting*, as are the non-metallics.

The greater portion of the booklet is devoted to the subject most on prospectors' minds today, that of uranium—"the greatest prospecting boom the world has ever known." Dake discusses uranium, methods of hunting, how it is formed and tested, which minerals carry uranium and where it has been found.

A final chapter includes many fascinating notes on prospecting, such as new geophysical studies, how mines are salted, how rich mines are missed and a few other items of mining lore.

Published by the Mineralogist Publishing Company, Portland, Oregon; paperbound, 80 pages, well-illustrated. \$2.00.

The Santa Fe, New Mexico, Gem and Mineral Club held an exhibit night recently at which members won ribbons and awards for the best and most attractive displays. Ten classifications for entries included: most varieties from one location in New Mexico, best single specimen, best mineral collection, best fossil collection and best collection of one family of minerals.

• • •

Crestmore Quarry will be open again to individuals and groups from 8 a.m. to 3 p.m., except Sundays and holidays. Permission to visit the quarry should be obtained at least one week in advance. The mailing address is P.O. Box 832, Riverside, California. (From the Long Beach, California, *Mineral News*.)

• • •

A rummage sale on August 25, 26 and 27 is being planned by the Tacoma, Washington, Agate Club. The sale will be held at 743 So. Tacoma Avenue, Tacoma. Items for sale will include clothing and dishes.

• • •

Jasper, manganite, pyrolusite and psilomelane were minerals collected by the Montebello, California, Mineral and Lapidary Society members on a recent field trip to Lavic, California, and Pisgah Crater.

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John and Peggy Powell, of the Mineralogical Society of Southern California, Pasadena, have made a trip to Arizona where they distributed about 40 boxes full of such things as clothing and abalone shells to the Navajos and Hopis. They have spent the past year collecting the items.

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12"	22.26	18.53
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18"	65.60	43.20
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24"	93.24	65.73
30"	149.62	125.73
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Real rockhounds saws favored for their big capacity and lifetime construction. "Magic-Brain" automatic feed for above \$46.35

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Baroque Bracelet Kits—s/s or g/f.....\$3.50
Baroque Earring Kits—s/s or g/f.....\$1.75
Glyptol Cement, tube\$.60
Please add 10% federal tax and postage

More than 700 persons attended the Wichita, Kansas, Gem and Mineral Society show in April. There were fewer cases this year than last. Main points of interest were the operating lapidary equipment and the case of radioactive minerals with Geiger counters available. *Quarry Quips*

THE PROSPECTOR'S CATALOG
We are pleased to announce the advent of a new **Minerals Unlimited Catalog**, specifically designed for the amateur or professional prospector. If you are interested in **Geiger Counters, Mineralights, Blowpipe Sets, Gold Pan** or any of the other equipment necessary to a field or prospecting trip, send 5c in stamps or coin for your copy.
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220 grit	2.95	3.95	5.95	8.25	12.50
320 grit	3.35	4.50	6.70	9.40	14.20
Shipping weight	2 lbs.	3 lbs.	5 lbs.	6 lbs.	9 lbs.
Crystolon Wheel Dressing Brick 6"x2"x1".....					95c

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Grit Size	1 Pound	5 Lb. Lots	10 Lb. Lots	25 Lb. Lots
80, 100, 120, 180, 220	\$.83	\$.52	\$.39	\$.30
2F (320), 3F (400)38	.57	.41	.32
Graded 400	1.09	.73	.57	.48
Graded 600	1.35	.94	.78	.69

DURITE (Silicon Carbide) ROLL SANDING CLOTH—

Available in 120, 220, 320 grits

Dry Rolls	
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10" wide, 5 ft. long—	2.00; 150-foot roll— 39.77
12" wide, 5 ft. long—	2.25; 150-foot roll— 47.70

Wet Rolls	
3" wide, 10 ft. long—	\$2.00; 150-foot roll—\$21.60
10" wide, 40 in. long—	2.60; 150-foot roll— 71.25

DURITE SANDING CLOTH in round disks . . .

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6" 5 for \$1.00; 25 for \$ 3.90		8 for \$1.00; 25 for \$ 2.25	
8" 3 for 1.10; 25 for 7.00		5 for 1.00; 25 for 4.10	
10" 2 for 1.15; 25 for 11.00		3 for 1.00; 25 for 6.45	
12" 2 for 1.65; 25 for 16.00		2 for 1.00; 25 for 9.45	

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4" diameter by .205" thick	\$ 7.80	10" diameter by .040" thick	\$14.80
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8" diameter by .032" thick	10.40	16" diameter by .050" thick	28.60
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CARE TO PAN GOLD? HERE'S HOW IT'S DONE

Panning gold is a simple process. It is based on the principle that heavy materials mixed with other materials will tend to separate from the mixture and concentrate on the bottom when agitated in a suitable container. Water is used to assist the process, although dry washers are often used in arid locations.

1. When you have picked your spot, scoop up a pan full of sand and gravel.
2. Submerge your pan about two or three inches under water and stir the gravel by hand, this will loosen up the mud and silt and allow them to float out.
3. Pick out and discard the larger rocks.
4. Slight agitation will bring the larger rocks and gravel to the surface and they may be pushed off.
5. Lift your pan out of the water and rotate it with a circular agitation motion. This loosens more sand and mud and by tipping the pan away from you allows them to run out.
6. Scrape off the top layer, submerge your pan again to pick up more water and pan again.

After five or six pannings, you will find mostly black iron sand and, perhaps, gold. Let a few spoons of water rotate around the pan to further separate the gold from the iron.

If you see a tiny streak or feather of yellow at the rear of the iron, that's "color." A magnetized knife blade will pick up the iron, leaving the gold. This works better under water. Pick out the small particles of gold with tweezers and magnifying glass, placing them in a small glass vial. (From an article by Henry Hart in the *Rockhound Call*, bulletin of the Compton, California, Gem and Mineral Club.)

Convention of the Midwest Federation of Mineralogical and Geological Societies was to be held at the Hotel Detroit, Detroit, June 23-25. A large number of exhibits from member societies and commercial exhibits were expected.

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BOOKS of the SOUTHWEST

WHEN BUTTERFIELD STAGES CARRIED THE U.S. MAIL

In September, 1858, when the first Butterfield Overland Mail left St. Louis for San Francisco, it had for its only through passenger, Waterman L. Ormsby, a special correspondent of the New York Herald Tribune. His narrative of the trip, written enroute, and published in the Herald Tribune at that time, is reprinted in *The Butterfield Overland Mail*, edited by Lyle H. Wright and Josephine Bynum. This was indeed, an important milestone in the history of American mail-system and travel.

The western route was over 2700 miles long and the first run was made in 23 days and 23½ hours. Ormsby was impressed with the importance of his famous trip, and his account is that of a lively observer of the country through which he is traveling. The changing landscape, the hardships, the accommodations, the constant need for speed to maintain the schedule, are related in detail. Ormsby gives the arguments for and against the competing routes and the reasons why Butterfield and associates received the contract—the largest one for mail service ever given.

Reprinted in the book also, is an eastbound reporter's version (from the San Francisco Daily Evening Bulletin) of the trip from Fort Smith to Memphis. The eastbound mail left San Francisco September 15, the westbound left St. Louis September 16, and the two met one hundred miles east of El Paso, Texas, eight hours ahead of time. Ormsby writes of arriving in San Francisco in October—"in a jiffy we were at the postoffice door, blowing the horn, howling and shouting for somebody to come and take the Overland mail. I thought nobody was ever going to come—the minutes seemed days—but the delay made it even time, and . . . it was just 23 days, 23½ hours from the time that John Butterfield, the president of the company, took the bags as the cars moved from St. Louis."

Recently the original time-schedule and instruction sheet issued to agents by the Overland Mail company was discovered in the Lieber collection in the Huntington Library, and a reproduction forms the important frontispiece of *The Butterfield Overland Mail*.

Published by the Huntington Library, San Marino, California, on the private press of C. F. Braun & Co., Alhambra, California. Map of the route and informative notes. 179 pages including index. \$4.00.

PIONEERING IN ARIZONA

Pioneer Stories of Arizona's Verde Valley is a collection of 96 individual stories told by the earliest settler, or by members of their family who heard them first hand. Unedited, with only the preface, introductory chapter and index written by professional writers, this book (compiled by the Verde Valley committee) is a true, at times understated account of day-by-day pioneer living.

The earliest settlers have recounted the trips of their families across the plains by ox-carts, the frequent Indian raids, the building of Fort Lincoln, and the growth of the Verdes community. They were a rugged stock. One of the first, the Johnson party, lived in adobes of straw, grass and mud, which they made themselves, the grass being cut not only by hand, but by penknife; then there is Cap'n Smylie, who liked the "good old days" when he could ride a horse from sunup to sundown without tiring and when, as a boy, could run from 15 to 20 miles without pause. The Charles Boyers, as his wife Mary writes, did everything from grubbing wild hay for the Fort in trade for supplies, to hauling logs, to managing a station for the stage running from Prescott to Phoenix. Place names derived their origin from odd incidents, as Mary relates. She was fond of buttermilk, and Buttermilk Gulch near Cherry Creek is so named because once, when Charles was bringing home a 5-gallon can, the oxen became frightened, upset the cart and "rainbowed" buttermilk from one side of the canyon to the other. Besides being lively reading, the authentic background information is a bonanza to anyone interested in the West of the period between 1865 and 1890.

Published by the Verde Valley Pioneers Association, this 240 page book contains about 90 pictures of the pioneers themselves. Paperbound, with cover drawing by the western artist, R. Farrington Elwell. \$3.00.

NEW CALIFORNIA GUIDE BOOK IS PUBLISHED

As Andrew Hepburn, author of the *Complete Guide to California* writes, "though it may appear presumptuous to compress the fabulous range of California within a single book — it has been done here . . ." Part of the American Travel Series, No. 2, this book

gives practical travel guidance through simple, easy to read sectionalized maps and concise, informative accompanying text.

Complete Guide to California tells you where to go, what to see, what to do, how to get there, where to stay, where to eat and how much to pay. Probably the most helpful standard it has adopted is the use of sectionalized maps, with the district fully described, making it easy for the traveler, no matter what point of entry he uses into the state. It gives impartial facts about 879 of the most interesting hotels, motor courts, resorts and restaurants; 217 places to visit and more than 100 "off the beaten path" attractions.

Published by Travel Enterprises, Inc., New York, New York. Illustrated with 60 beautiful photographs and 30 fine maps. Paperbound, glossy cover. Pocket size. 192 pages. \$1.00.

• • •

Second edition of the popular *Death Valley Scotty Told Me*, by Eleanor Jordan Houston, has just been released by Franklin Press, of Louisville, Kentucky. In the foreword to her first edition, Mrs. Houston said: "When my husband and I were his nearest neighbors in Death Valley, Scotty told me to write his favorite tales . . . I have tried to present Scotty as I knew him—the master storyteller, the humorist, the philosopher." Success of her goal was noted by the fact that the first edition was a sellout. The second edition is expected to be equally successful. 106 pages, paperbound, illustrated. \$1.25.

(Continued on page 47)

Books reviewed on this page are available at
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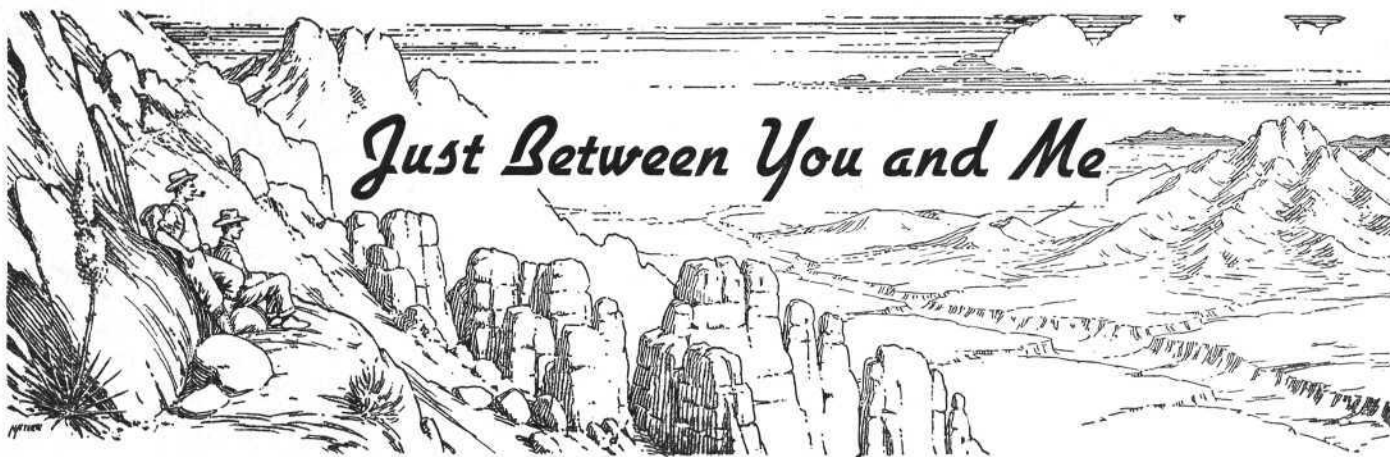
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Main Office: New York 1, N. Y.



By RANDALL HENDERSON

WE PUBLISH many lost mine and buried treasure stories in *Desert Magazine*—legends which have been passed along for generations, and tales which appear to have a factual background.

But there is always a missing link. Some essential bit of information has been lost, or garbled. There are many lost mine hunters in the West, and they write to us for more information or for clarification of something that has been published.

We are never able to give a satisfactory answer to such letters—because all the available information was quoted in the story as published. That is the reason the mines are lost—because some essential clue to the location is missing. If anyone could supply that missing link—then it would no longer be a lost mine.

Lost mine hunting is a healthful and exhilarating hobby. As a hobby I can recommend it for those who have the time and leisure. As a way of making a living it is the most frustrating occupation I know anything about.

* * *

One of the speakers at the recent Arid Lands Symposium in Albuquerque called attention to the increasingly large areas of fertile land being taken out of productive use for subdivisions, airfields, factories, highways and recreation plots. He suggested that it may become necessary to shift industry, insofar as is practicable, to the arid regions.

Before that time comes I hope that federal or state agencies will set up a vast zoning plan wherein certain areas will be reserved for the factories, and other areas limited to residential and recreational use. Belching smoke stacks and diesel trucks do not make for the clean air that you and I prefer for our home and playground environment.

The Los Angeles metropolitan area wanted industry—always more industry. And now the city folks are paying a terrific price in smog and traffic congestion. One would think that Los Angeles had learned its lesson. But apparently not, for I note in the morning paper that the president of the Los Angeles chamber of commerce is sending a protest to Washington against the proposal to disburse the aircraft industry to inland sites. I am wondering how much punishment those Los Angeles folks can take.

Sooner or later the chambers of commerce in large population centers will have to change their basic goals, and perhaps in the small towns too. Instead of putting

the emphasis on quantity—more people and more factories—they will discover there is something more important than quantity—and that is quality. They'll seek, not bigger towns, but cultural projects which will provide more beauty and intellectual and spiritual growth for those who dwell in the community.

* * *

This month, a new department in *Desert Magazine*—for the uranium fraternity! The current uranium boom is the most far-reaching development in western mining since Marshall discovered gold at Sutter's saw mill in 1848. The search for uranium ores centered mainly on the Colorado plateau for a time, but now it has spread to the entire continent.

However, the best hunting ground remains the Great American Desert because this is essentially a land of bare rocks and minerals, and much of it remains in the public domain where there are few restrictions on the man with the Geiger counter.

The mails are bringing lurid circulars telling about the fortunes to be made in uranium stocks—offered at a few cents a share. Some of them probably will pay off—many of them will not, if we may judge from the history of mining promotion. You have only a gambler's chance—unless you know a great deal about uranium mining, and about the men who are promoting the stocks.

* * *

Marshal South wrote of July on the desert:

"It is hot these days—but not too hot. The human system is adaptive; it adjusts speedily to its environment. . . . There is a good deal of myth about the terrors of desert summer. With a commonsense adaptation to conditions the desert in summer is as much a region of enchantment as at any other season. And with charms peculiar to itself.

"Nowhere but in the desert, and in summer, can you see such magnificent cloud effects as those which tower into the hard turquoise sky above the heat-dancing wastelands. These mighty mountains of dazzling white and ominous gray cease to be clouds. Rather they are the Titan sculptures of invisible gods. . . . Small wonder you will find no atheists among the dwellers of the unspoiled wasteland. Such things belong to the shadows of smoky walls; to the dulling thunder of machinery and the milling of tired crowds. . . . Atheists do not flourish in desert solitudes."

BOOKS

(Continued from page 45)

THRILLING SAGA OF AMERICAN EXPANSION

Bent's Fort is the thrilling, historical account in narrative form of the "adobe empire that Mexico came to fear—for here was the spear-head of the American expansion to the Southwest." The Bent brothers' lives helped to shape a whole era and their fort was the focal point of expansion, diplomacy and exploration between the United States, Texas and Mexico, and of trade with the Indians. David Lavender, the author, has researched so thoroughly in a little known era in American westward expansion, that *Bent's Fort* becomes a detail perfect document of that time.

Within two years the fort became the "center of a primitive empire that covered the entire watershed of upper Arkansas." Later, Charles Bent was named governor, with his office in Santa Fe. He set the machinery in motion which served New Mexico for many years to come. William Bent became U.S. appointed agent for the Cheyennes.

This is history interpreted in the daily living of diplomats, Indians, trappers and traders that the reader will not soon forget.

Published by Doubleday and Company, Inc., Garden City, New York. Bibliography; extensive background notes on each chapter. 450 pages. \$5.50.

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WHERE TO GO AND WHAT TO SEE IN MEXICO

A revised edition of Frances Toore's *Guide to Mexico* brings up-to-the-minute data on the new West Coast highways into Mexico City and includes an account of Baja California, supplemented by maps and illustrations.

Taking the traveler step by step, beginning with preparations for the trip, whether by car, plane, train or bus, *New Guide to Mexico* then explains in detail the highlights of each section of the three approaches to Mexico City — traveling from the U.S. border via the Pan American highway; from El Paso via the Central Highway and from Nogales via the West Coast highway.

Published by Crown Publishers, Inc., New York. 12 maps, including street map of Mexico City; over 80 illustrations; Mexican bibliography. 277 pages with index. Hard cover; pocket size. \$2.95.

Arid Lands Meeting Offers New Ideas for Ever-expanding Deserts

One of these days modern man may revert to conservation practices of the Indians and prehistoric dwellers of the Middle East in his progressive efforts to live on this planet. To these early agriculturalists growing crops from desert lands was no problem. With no more than one flash flood a year they turned arid lands into productive fields.

Dr. Michael Evenari, Israel's delegate to the recent International Arid Lands Symposium held in Albuquerque and Socorro, New Mexico, was one of 78 scientists from the world's arid lands, gathered under the sponsorship of the United Nations Educational, Scientific and Cultural Organization and the American Association for the Advancement of Science.

Dr. Evanari explained he had discovered that Indian ruins at Gran Quivira show similar growing methods for desert lands to those of the prehistoric dwellers in the Middle East.

The method, which is being tried out in Israel again today, is to build earth dams partially or entirely across gullies to slow the rush of flash flood waters. Diversion canals at the dams then turn the water over terraced fields adjoining the gullies.

More than 400 scientists attended these important arid lands meetings. They heard a former president of the University of Arizona blame man for bringing desolation to huge portions of the desert and propose a land swap to turn more fields into production.

Homer Le Roy Shantz, keynote speaker at the conference, said that arid lands are increasing. Grazing and mining overuse by man is the reason, he said, and one solution would be to develop drought-resistant plants and animals that could survive despite lack of moisture.

Since much of the earth's productive soils are occupied by cities, highways, landing fields, reservoirs, recreation areas and factories, their crop production capacity is lost.

Dr. Irving Langmuir, Nobel Prize winner and father of the science of cloud seeding, cautioned that rain-making in some areas may create drought in others. Conversely, he said that a single silver iodide generator operating at Alamogordo in 1952 caused the disastrous Missouri Valley floods of that year.

"We had been seeding for some time, and the storms kept getting bigger and better," Dr. Langmuir explained. "I told the armed forces heads administering Project Cirrus that I felt we

ought to stop seeding as the rains in the Missouri Valley kept falling. . . . We finally stopped on July 2. On July 7 the flood just about devastated Omaha."

He said that the silver iodide particles were sent into the air in New Mexico and were blown across the Mississippi by west winds, where they came into contact with moist air masses from the Gulf of Mexico.

Southwestern droughts could be caused by the same process, Dr. Langmuir said. The storms triggered by the silver iodide and moist air contact in the Southeast sucks in the moist Gulf air which normally flows into the Southwest. During a cloud seeding test in 1949 under these conditions, the Southwest had its driest spell in 30 years.

Means of solving drought problems were suggested by the scientists. John H. Dorroh, Jr., with the Albuquerque office of the Soil Conservation Service, maintained that at best only two percent of the water that falls to the desert may ever be used. The remaining 98 percent is sucked back by evaporation. The best means to solve the problem, he said, would be to plant forage grasses that would make use of the water when it fell, and to clear streams of water-consuming plants which use up water before it can be run on irrigated fields.

Terah L. Smiley, University of Arizona scientist, said recent studies show no evidence that droughts run in cycles. Between 50 B.C. and 320 A.D. the southwestern United States had few droughts. Droughts began in 320 and lasted until the latter part of the 13th century. Another severe drought occurred in the 16th century. Conditions were then favorable until a short drought came at the turn of the 20th century.

Israel's Dr. Evenari also suggested the use of dew to replace irrigation. Watering by leaf-absorption, instead of at the roots, uses much less water, he said.

The valuable symposium closed with adoption of a resolution submitted jointly by Dr. Wilhelmus F. J. M. Krul, salt water expert from The Netherlands, and Dr. Peter Duisberg, El Paso, Texas, soil specialist. Their resolution stated that arid lands "know no national boundaries" and expressed the hope there could be more such friendly meetings "for the benefit of all mankind."



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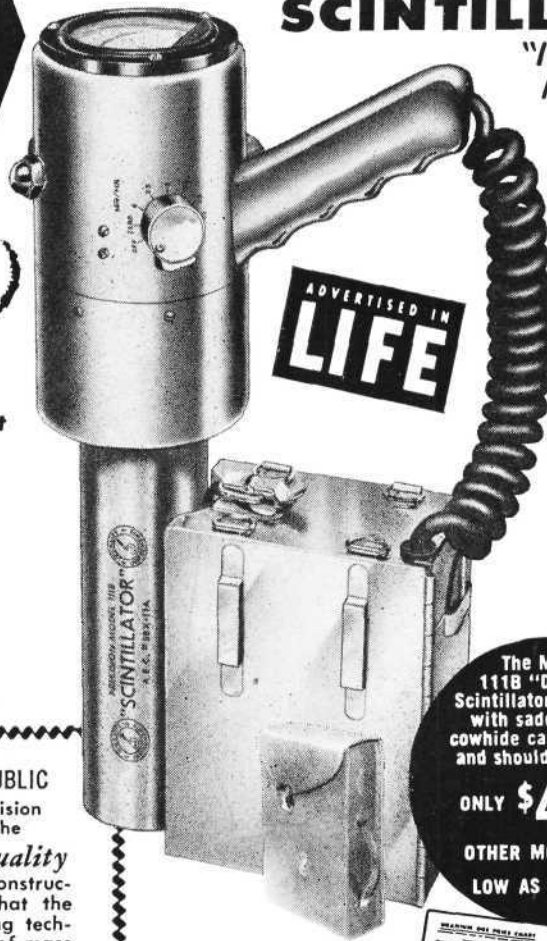
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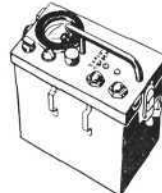
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